

# Service Manual

 **PIONEER®**  
*The Art of Entertainment*

ORDER NO.  
**RRV1967**

FILE-TYPE CD PLAYER

# PD-F807

- Refer to the service manual RRV1898 for PD-F907/KU.

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	PD-F807		
KUXQ	○	AC120V	_____

## ■ CONTRAST OF MISCELLANEOUS PARTS

- NOTES :
- Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.
  - The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
  - Reference Nos. indicate the pages and Nos. in the service manual for the base model.
  - When ordering resistors, first convert resistance values into code form as shown in the following examples.
- Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by  $J = 5\%$ , and  $K = 10\%$ ).
- 560  $\Omega \rightarrow 56 \times 10^1 \rightarrow 561$  ..... RD1/4PU  $\begin{bmatrix} 5 & 6 & 1 \end{bmatrix} J$   
 47k  $\Omega \rightarrow 47 \times 10^3 \rightarrow 473$  ..... RD1/4PU  $\begin{bmatrix} 4 & 7 & 3 \end{bmatrix} J$   
 0.5  $\Omega \rightarrow R50$  ..... RN2H  $\begin{bmatrix} R & 5 & 0 \end{bmatrix} K$   
 1  $\Omega \rightarrow 1R0$  ..... RS1P  $\begin{bmatrix} 1 & R & 0 \end{bmatrix} K$
- Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
- 5.62k  $\Omega \rightarrow 562 \times 10^1 \rightarrow 5621$  ..... RN1/4PC  $\begin{bmatrix} 5 & 6 & 2 & 1 \end{bmatrix} F$

## ■ CONTRAST TABLE

PD-F807/KUXQ and PD-F907/KU are constructed the same except for the following:

Ref. No.	Mark	Symbol and Description	Part No.		Remarks
			PD-F907/KU	PD-F807/KUXQ	
P6-4	NSP	<b>ASSEMBLIES</b> MOTHER BOARD ASSY $\perp$ SWITCH BOARD ASSY	PWM2119 PWZ3432	PWM2124 PWZ3434	
		<b>PACKING</b>			
P3-3		Remote Control Unit (CU-PD080)	PWW1132	Not used	
P3-4		Battery Cover	AZA7204	Not used	
P3-6		Operating Instructions(English)	PRB1263	PRB1275	
P3-8		Polyethylene Bag	Z21- 038	Not used	
P3-11		Packing Case	PHG2285	PHG2332	
P3-12		Mirror Mat	Z23- 020	Not used	
P3-12		Packing Sheet	Not used	PHF1001	
P3-13	NSP	Battery (R6P,AA)	VEM- 013	Not used	
		<b>EXTERIOR</b>			
P6-18		Rear Base	PNA2389	PNA2445	
P6-21		Back Fence	PNW2671	PNW2848	
P6-26		Hood Base	PNW2633	PNW2847	
P6-35		Disc Rack	PNW2632	PNW2845	
P6-36		Mecha Base	PNW2639	PNW2851	
P6-50		Operation Panel	PNW2773	PNW2862	
P6-52		Hood	PNW2732	PNW2850	

## ■ CONTRAST OF PCB ASSEMBLIES

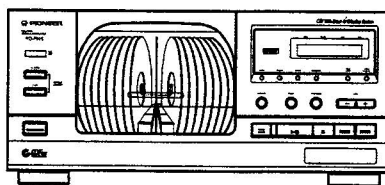
### ○ SWITCH BOARD ASSY

PWZ3434 and PWZ3432 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		PWZ3432	PWZ3434	
	C752 Remote receiver unit	CKCYF103Z50 GP1U27X	Not used Not used	

# Service Manual

**PIONEER®**  
The Art of Entertainment



ORDER NO.  
RRV1898

## FILE-TYPE CD PLAYER **PD-F957** **PD-F907**

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	Remarks
	PD-F957	PD-F907		
KU	—	O	AC120V	
KC	—	O	AC120V	
KU/CA	O	—	AC120V	

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# 1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.



## WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).

When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.



## NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

## REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

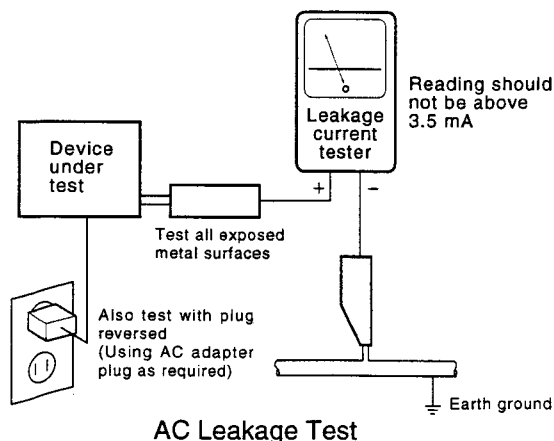
(FOR USA MODEL ONLY)

## 1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

### LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 3.5 mA.



**ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.**

## 2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a  $\Delta$  on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

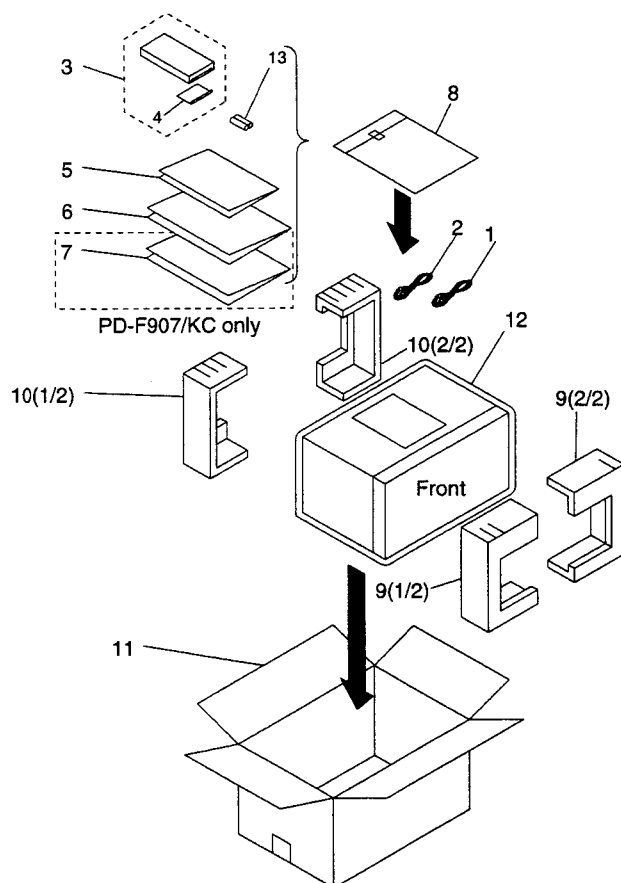
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.



## 2. EXPLODED VIEWS AND PARTS LIST

NOTES : ● Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.  
 ● The  $\perp$  mark found on some component parts indicates the importance of the safety factor of the part.  
 Therefore, when replacing, be sure to use parts of identical designation.  
 ● Screw adjacent to  $\nabla$  mark on the product are used for disassembly.

### 2.1 PACKING



#### (1) PARTS LIST

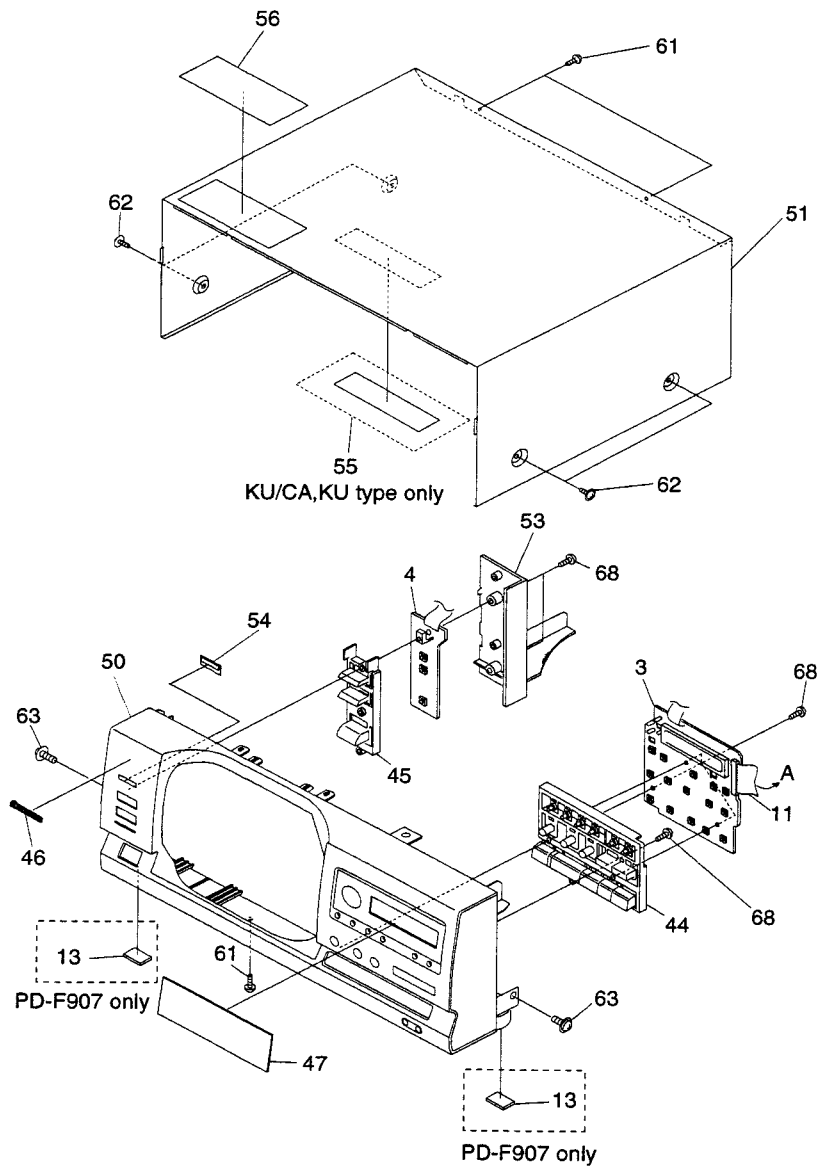
Mark	No.	Description	Parts No.
	1	Control Cable (L=1.0m)	PDE1247
	2	Output Cable (L=1.0m)	PDE1248
	3	Remote Control Unit	See Contrast table (2)
	4	Battery Cover	AZN7204
NSP	5	Warranty Card	See Contrast table (2)
	6	Operating Instructions (English)	See Contrast table (2)
	7	Operating Instructions (French))	See Contrast table (2)
	8	Polyethylene Bag	Z21 - 038
	9	Styrol Protector F	PHA1307
	10	Styrol Protector R	PHA1308
	11	Packing Case	See Contrast table (2)
	12	Mirror Mat	Z23 - 0204
NSP	13	Battery (R6P, AA)	VEM - 013

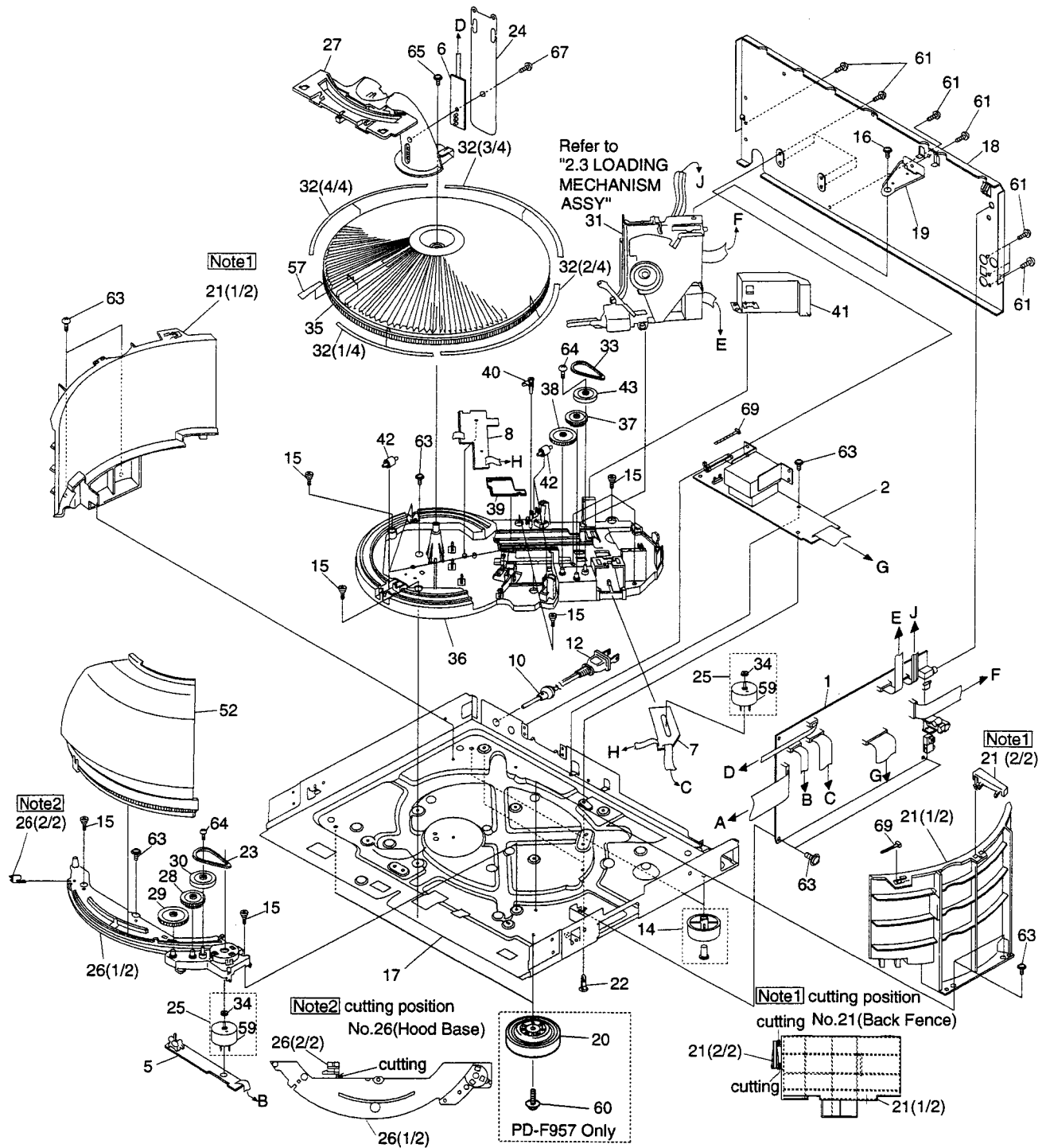
#### (2) CONTRAST TABLE

PD-F907/KU,KC and PD-F957/KU/CA have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.			Remarks
			PD-F957/ KU/CA	PD-F907/ KU	PD-F907 KC	
NSP	3	Remoto Control Unit	PWW1130 (CU-PD088)	PWW1132 (CU-PD080)	PWW1132 (CU-PD080)	
	5	Warranty Card	ARY1044	ARY1044	ARY1039	
	6	Operating Instructions (English)	PRB1264	PRB1263	PRB1263	
	7	Operating Instructions (French)	Not used	Not used	PRD1023	
	11	Packing Case	PHG2304	PHG2285	PHG2286	

## 2.2 EXTERIOR





# PD-F957,PD-F907

## (1) EXTERIOR PARTS LIST

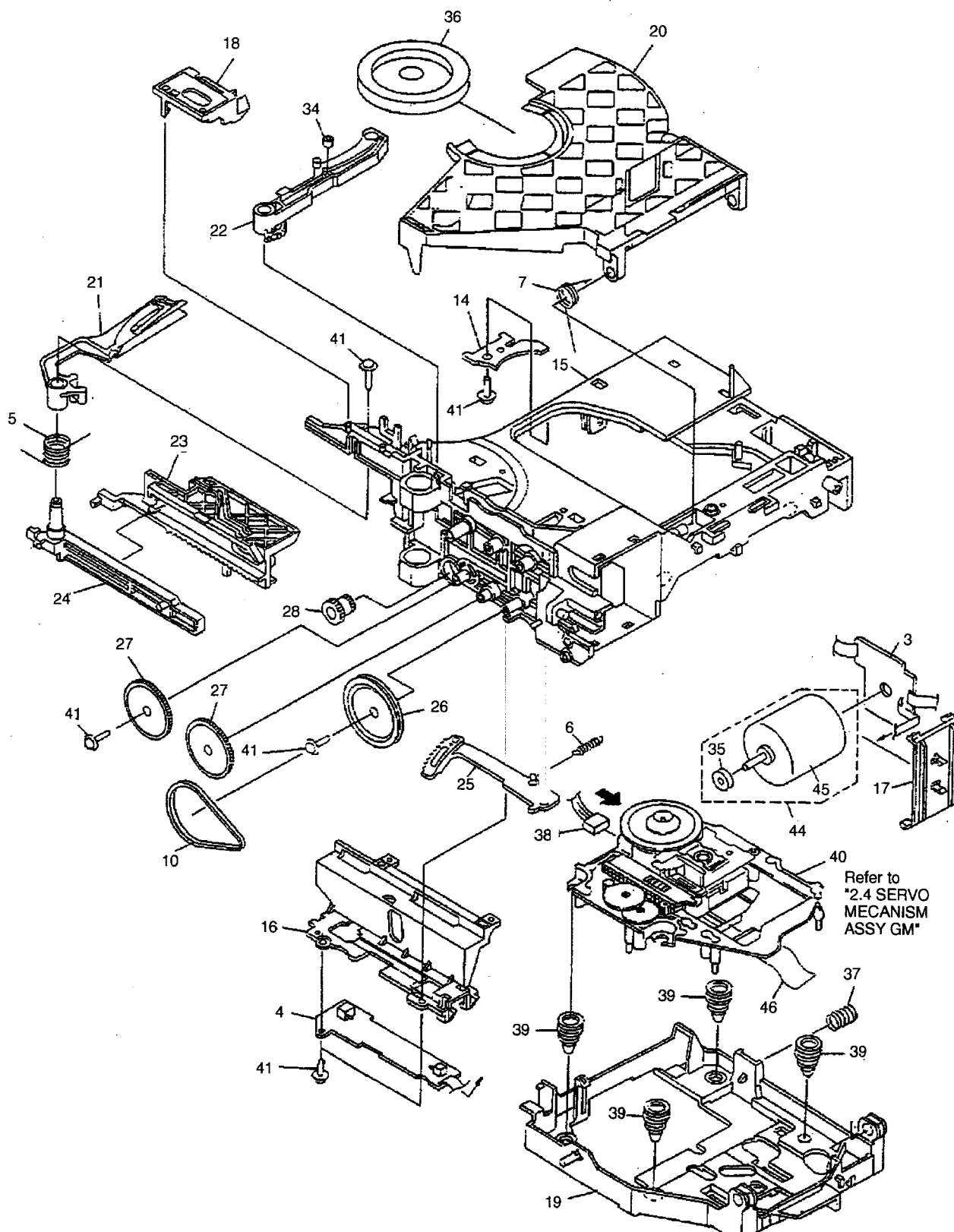
Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
↓	1	Main Board Assy	See Contrast table(2)	36	Mecha Base		PNW2639
↓	2	Power Board Assy	See Contrast table(2)	37	Gear		PNW2641
	3	Display Board Assy	See Contrast table(2)	38	Gear		PNW2642
NSP	4	Switch Board Assy	See Contrast table(2)	39	Slider		PNW2643
NSP	5	Door Board Assy	See Contrast table(2)	40	Lock Lever		PNW2644
NSP	6	Center LED Board Assy	See Contrast table(2)	41	Mecha Stopper		PNW2646
NSP	7	Select Motor Board Assy	PWZ3324	42	Roller		PNW2647
NSP	8	Sensor Board Assy	PWZ3327	43	Gear Pulley		VNL1662
	9	.....		44	Control Button		PAC1822
↓	10	Cord Stopper	CM - 22C	45	Power Button		PAC1833
	11	F.F.C/30V	See Contrast table(2)	46	Name Plate		VAM1073
↓	12	AC Power Cord	PDG1015	47	Display Window		See Contrast table(2)
	13	Rubber Sheet	See Contrast table(2)	48	.....		
	14	Foot Assy	See Contrast table(2)	49	.....		
	15	Screw C	PBA1106	50	Operation Panel		See Contrast table(2)
	16	Screw	PBA1108	51	Bonnet Case		PYY1191
NSP	17	Under Base	PNA2255	52	Hood		PNW2732
	18	Rear Base	See Contrast table(2)	53	Side Fence		PNW2674
	19	Stopper Angle	PNB1559	54	Sensor Acryl		VNK1566
	20	Insulator	See Contrast table(2)	55	65 Label		See Contrast table (2)
	21	Back Fence	PNW2671	56	Label		PRW1428
	22	Locking Card Spacer	VEC1596	57	Label		PRW1429
	23	Belt	PEB1288	58	.....		
	24	Cover	PNM1294	59	Slider Motor		VXM1033
	25	Motor Assy	PEA1333	60	Screw		IBZ30P080FZK
	26	Hood Base	PNW2633	61	Screw		BBZ30P080FZK
	27	Center Pole	PNW2634	62	Screw		FBT40P080FZK
	28	Gear	PNW2641	63	Screw		IBZ30P060FMC
	29	Gear	PNW2642	64	Screw		IPZ20P080FMC
	30	Gear Pulley	VNL1662	65	Screw		IPZ30P080FCU
	31	Loading Mechanism Assy	PXA1589	66	.....		
	32	Rack Label	PAM1732	67	Screw		PPZ30P050FMC
	33	Belt	PEB1288	68	Screw		PPZ30P100FMC
	34	Motor Pulley	PNW1634	69	Binder		Z09 - 056
	35	Disc Rack	PNW2632				

## (2) CONTRAST TABLE

PD-F907/KU,KC and PD-F957/KU/CA have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.			Remarks
			PD-F957/ KU/CA	PD-F907/ KU	PD-F907/ KC	
↓	1	Main Board Assy	PWZ3663	PWZ3400	PWZ3400	
↓	2	Power Board Assy	PWZ3668	PWZ3414	PWZ3414	
	3	Display Board Assy	PWZ3672	PWZ3426	PWZ3426	
NSP	4	Switch Board Assy	PWZ3675	PWZ3432	PWZ3432	
NSP	5	Door Board Assy	PWZ3681	PWZ3441	PWZ3441	
NSP	6	Center LED Board Assy	PWZ3683	PWZ3443	PWZ3443	
	11	F.F.C/30V	PDD1186 (40P F.F.C)	PDD1167 (32P F.F.C)	PDD1167 (32P F.F.C)	
	13	Rubber Sheet	Not Used	AEB1111	AEB1111	
	14	Foot Assy	REC1263	AEC1531	AEC1531	
	18	Rear Base	PNA2405	PNA2389	PNA2389	
	20	Insulator	PNW2766	Not Used	Not Used	
	47	Display Window	PAM1752	PAM1725	PAM1725	
	50	Operation panel	PNW2786	PNW2773	PNW2773	
	55	65 Label	ORW1069	ORW1069	Not used	

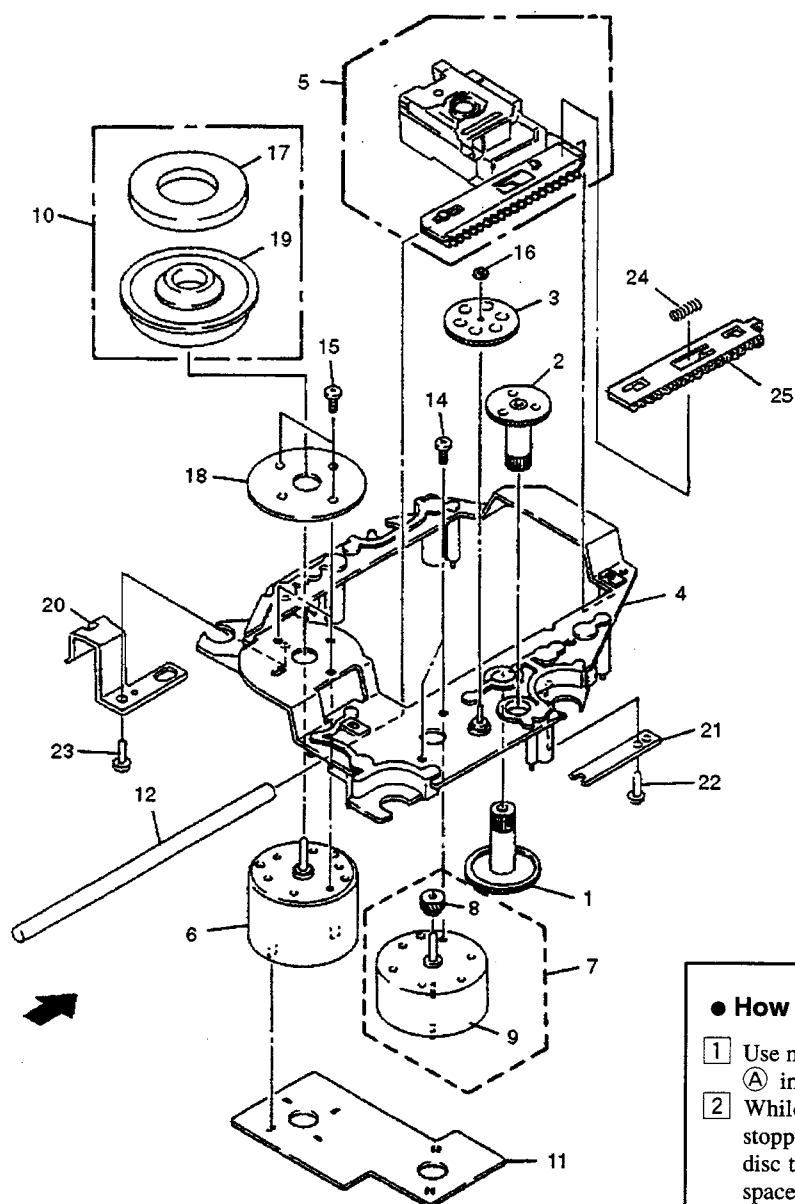
## 2.3 LOADING MECHANISM ASSY



# ■ LOADING MECHANISM ASSY PARTS LIST

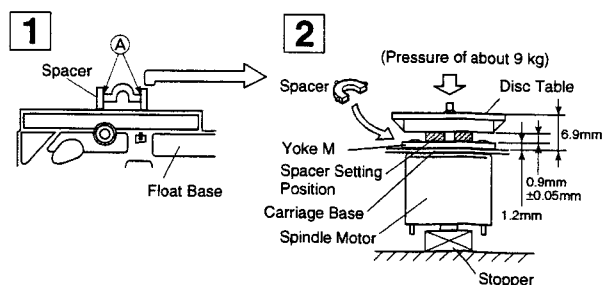
Mark	No.	Description	Parts No.
	1	.....	
	2	.....	
NSP	3	Loading Motor Board Assy	PWZ3337
NSP	4	Load SW Board Assy	PWZ3334
	5	Arm A Spring2	ABH7124
	6	Gear Plate Spring	ABH7051
	7	Clamp Spring	ABH7107
	8	.....	
	9	.....	
	10	Loading Belt	AEB7029
	11	.....	
	12	.....	
	13	.....	
NSP	14	Servo Stopper S	ANB7047
	15	Loading Base	ANW7086
	16	Cam Cover	ANW7052
	17	Motor Holder	ANW7053
	18	Sensor Holder	ANW7119
	19	Float Base 96	PNW2700
	20	Clamper Holder	ANW7117
	21	Arm (A)	ANW7057
	22	Arm (B)	ANW7058
	23	Drive Plate	ANW7059
	24	Arm Plate	ANW7060
	25	Gear Plate	ANW7111
	26	Gear Pulley (B)	ANW7062
	27	Gear A	ANW7063
	28	Drive Gear	ANW7064
	29	.....	
	30	.....	
	31	.....	
	32	.....	
	33	.....	
	34	Roller B	ANW7075
	35	Motor Pulley	PNW1634
	36	Clamper	PNW2743
	37	Float Spring	ABH7049
	38	Connector Assy (4P)	RDE1043
	39	Float Rubber	AEB7028
NSP	40	Servo Mechanism Assy GM	PXA1591
	41	Screw	IPZ20P080FMC
	42	.....	
	43	.....	
	44	Motor Assy	AEA7006
	45	Loading Motor	VXM1034
	46	16P FFC/30V	PDD1180
		Froil (for Service)	GYA1001
		Ha Nari (for Service)	GEM1016

## 2.4 SERVO MECHANISM ASSY GM



● How to Install the Disc Table

- 1 Use nipper or other tool to cut the three sections marked **A** in figure 1. Then remove the spacer
- 2 While supporting the spindle motor shaft with the stopper, put spacer on top of the yoke M, and stick the disc table on top (takes about 9kg pressure). Detach the spacer.



■ SERVO MECHANISM ASSY GM PARTS LIST

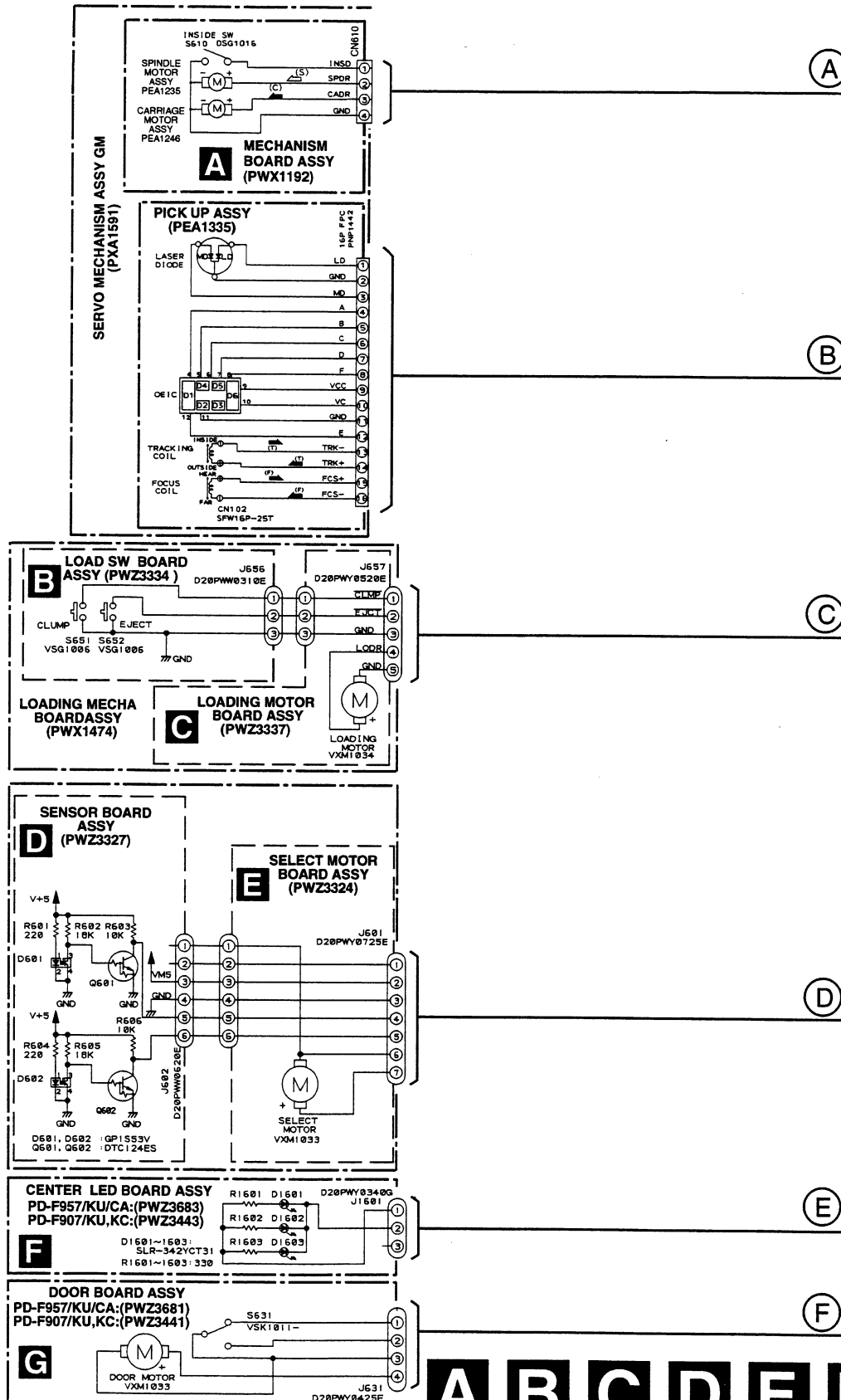
Mark	No.	Description	Parts No.
	1	Gear 1	PNW2052
	2	Gear 2	PNW2053
	3	Gear 3	PNW2054
	4	Carriage Base	PNW2699
	5	Pickup Assy - S	PEA1335
	6	D.C. Motor Assy (SPINDLE)	PEA1235
	7	Carriage DC Motor Assy	PEA1246
	8	Pinion Gear	PNW2055
	9	Carriage DC Motor/0.3W	PXM1027
	10	Disc Table Assy	PEA1314
	11	Mechanism Board Assy	PWX1192
	12	Guide Bar	PLA1094
	13	.....	
	14	Screw	JFZ17P025FZK
	15	Screw	JFZ20P040FMC
	16	Washer	WT12D032D025
	17	Clamp Magnet	PMF1014
	18	Yoke M	PNB1312
NSP	19	Disc Table	PNW2410
NSP	20	Float Angle	ANB7020
	21	Gear Stopper	PNB1303
	22	Screw	BPZ20P060FMC
	23	Screw	BPZ26P100FMC
	24	PU Rack Spring	ABH7077
	25	Rack Holder	PNW2056



### 3. SCHEMATIC DIAGRAM

Note: When ordering service parts, be sure to refer to "EXPLODED VIEW AND PARTS LIST" or "PCB PARTS LIST".

#### 3.1 MECHANISM BOARD ASSY,SENSOR BOARD ASSY,LOAD SW BOARD ASSY,SELECT MOTOR BOARD ASSY,LOADING MOTOR BOARD ASSY,CENTER LED BOARD ASSY, DOOR BOARD ASSY AND PICKUP ASSY



**A B C D E F G**

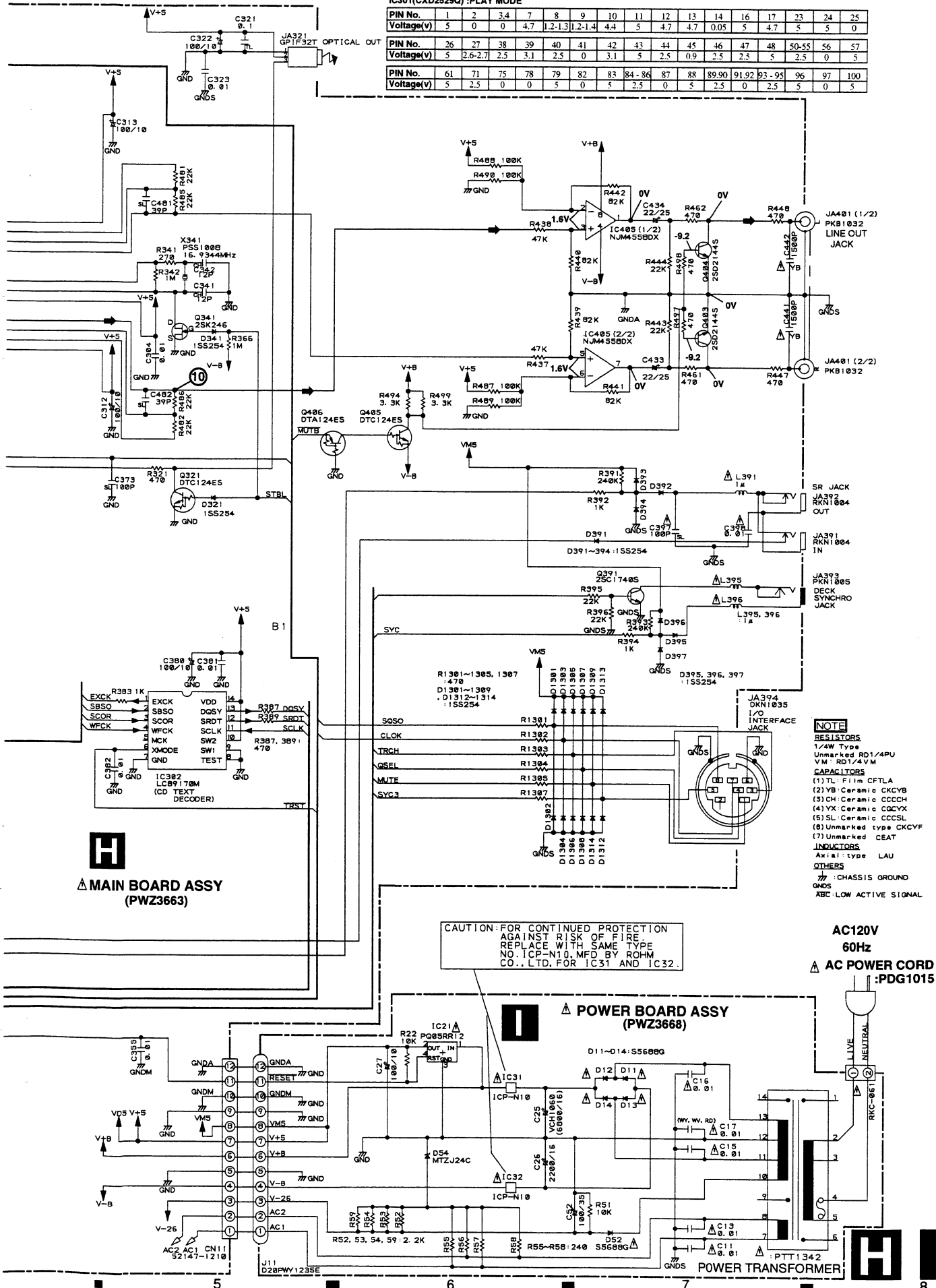
<b>PIN No.</b>	1	2	3	4	7	8	9	10	11	12	13	14	16	17	23	24	25
<b>Voltage(v)</b>	5	0	0	0	4.7	1.2-1.3	1.2-1.4	4.4	5	4.7	4.7	0.05	5	4.7	5	5	0

<b>PIN No.</b>	26	27	38	39	40	41	42	43	44	45	46	47	48	50-55	56	57
<b>Voltage(v)</b>	5	2.6-2.7	2.5	3.1	2.5	0	3.1	5	2.5	0.9	2.5	2.5	5	2.5	0	5

<b>PIN No.</b>	61	71	75	78	79	82	83	84-86	87	88	89,90	91,92	93-95	96	97	100
<b>Voltage(v)</b>	5	2.5	0	0	5	0	5	2.5	0	5	2.5	0	2.5	5	0	5



## 12



# PD-F957,PD-F907

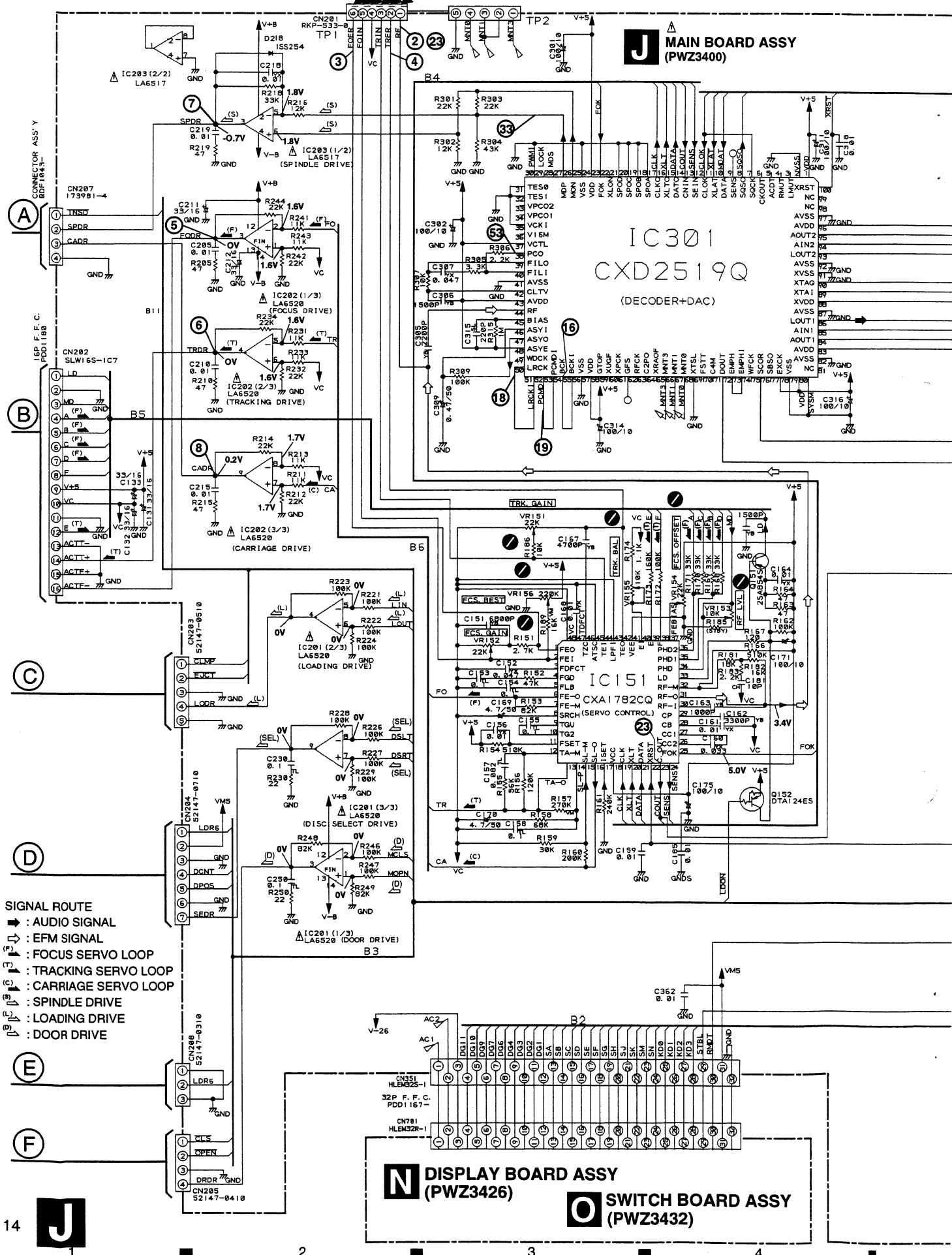
## 3.3 MAIN BOARD ASSY AND POWER BOARD ASSY (FOR PD-F907)

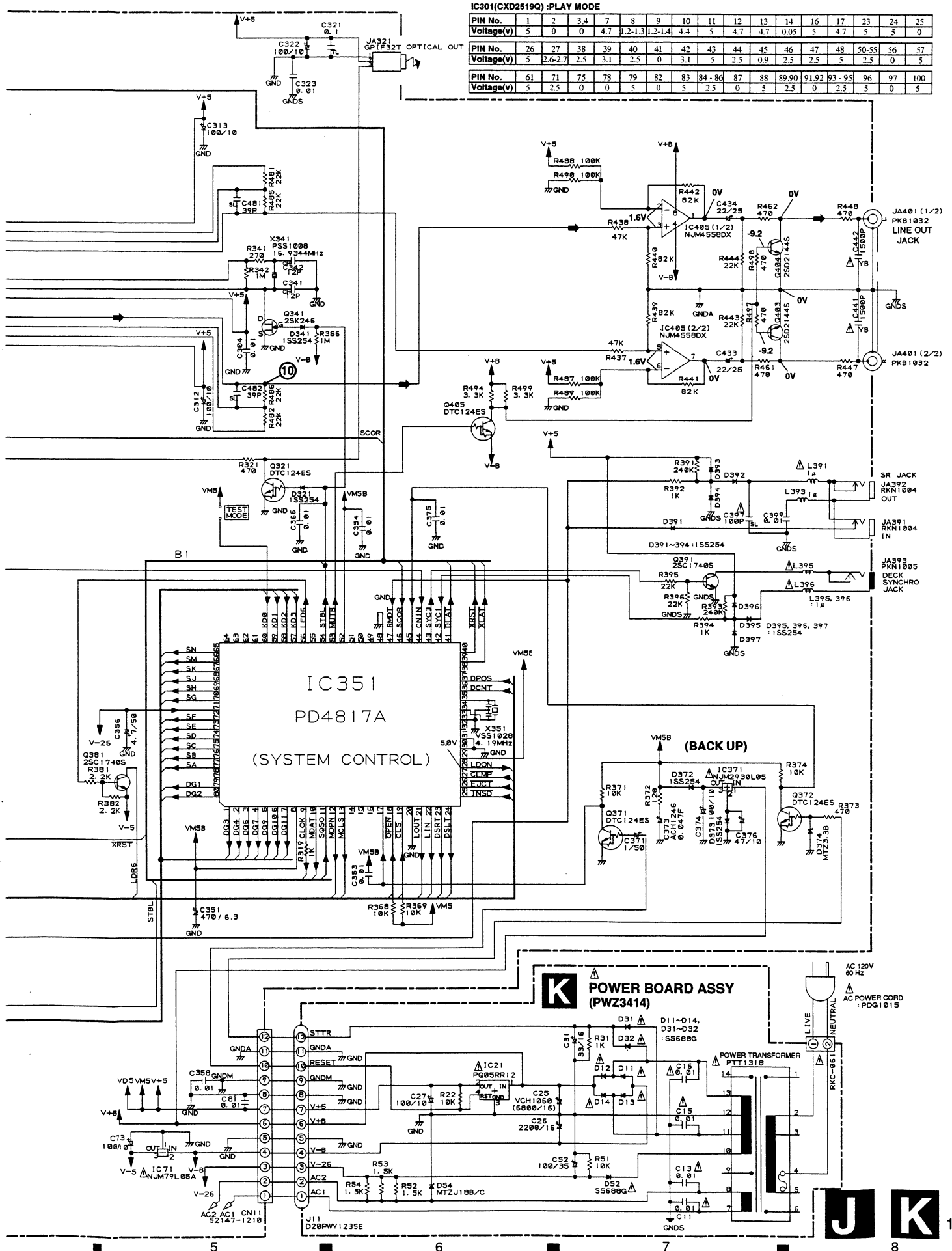
A

B

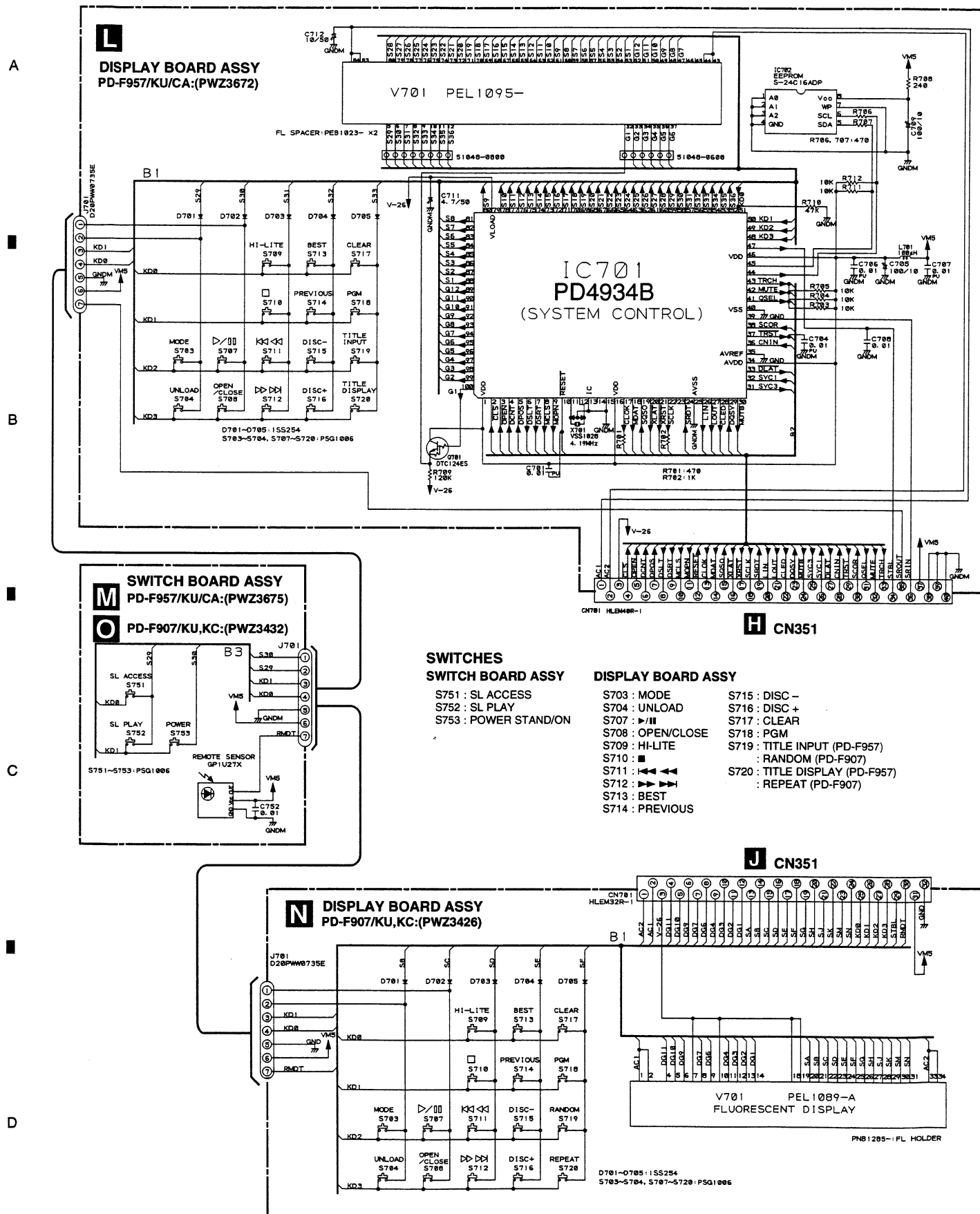
C

D





### 3.4 DISPLAY BOARD ASSY AND SWITCH BOARD ASSY

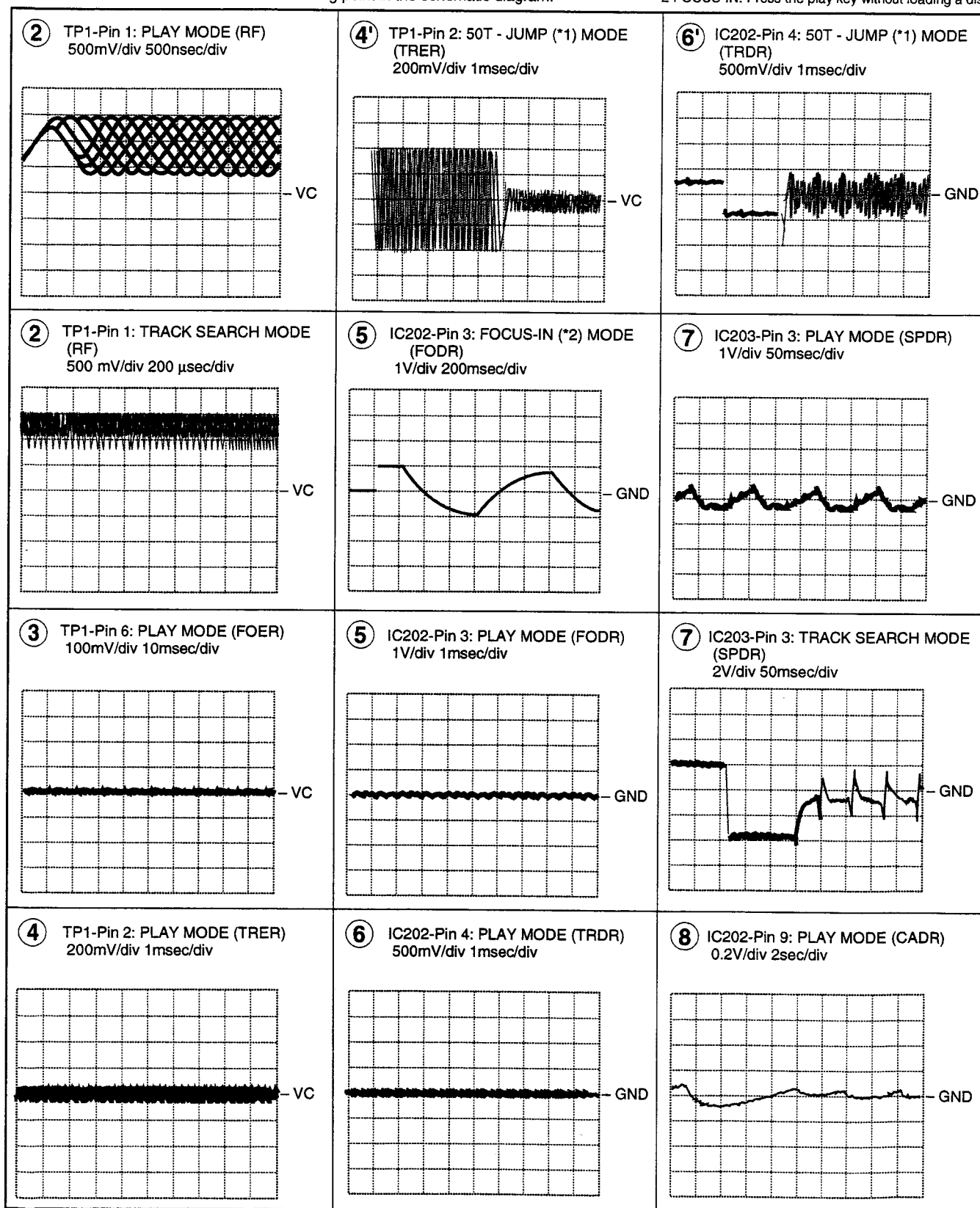


## Waveforms

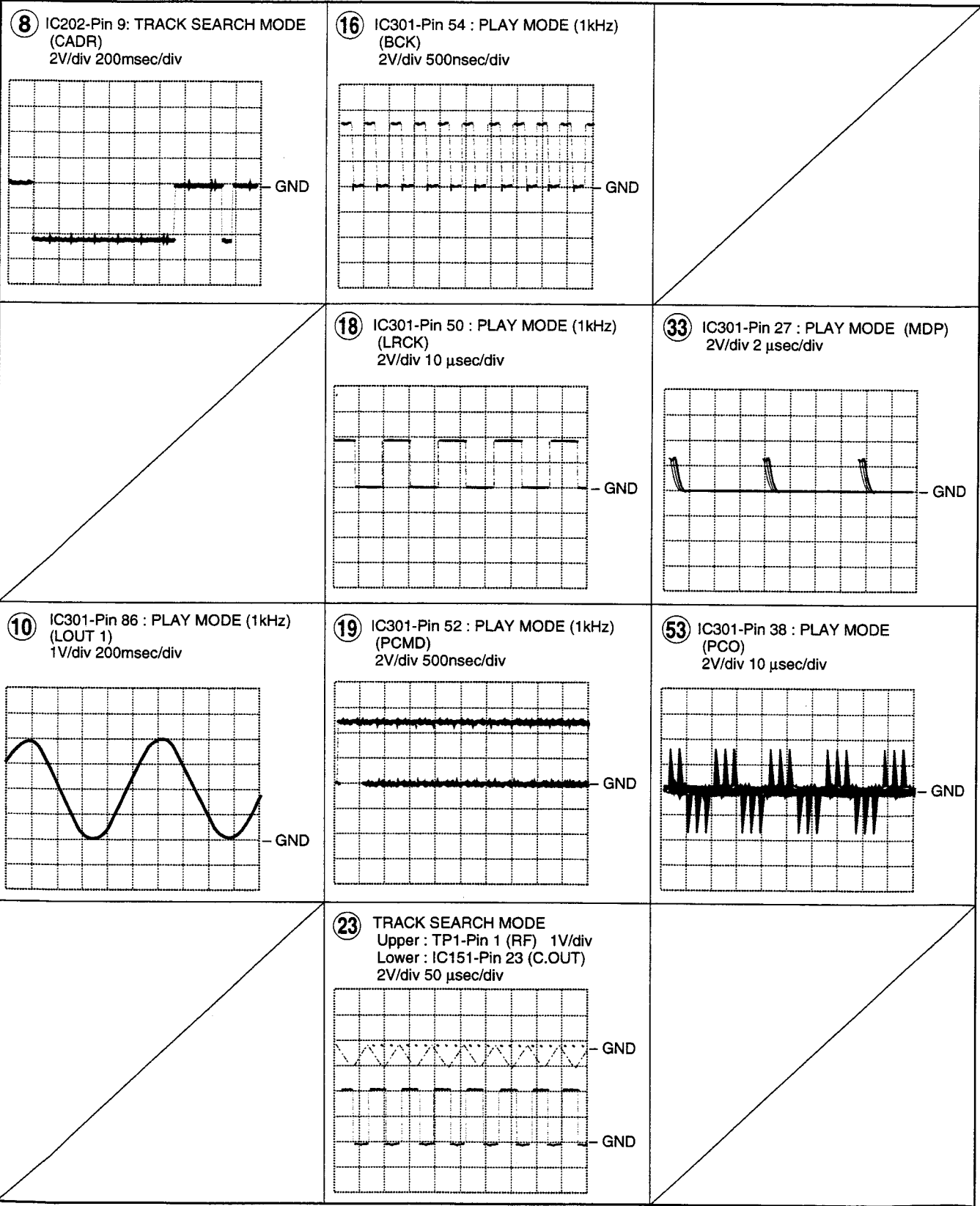
Note: The encircled numbers denote measuring point in the schematic diagram.

\*1 50T-JUMP: After switching to the pause mode, press the manual search key.

\*2 FOCUS-IN: Press the play key without loading a disc.



Waveforms

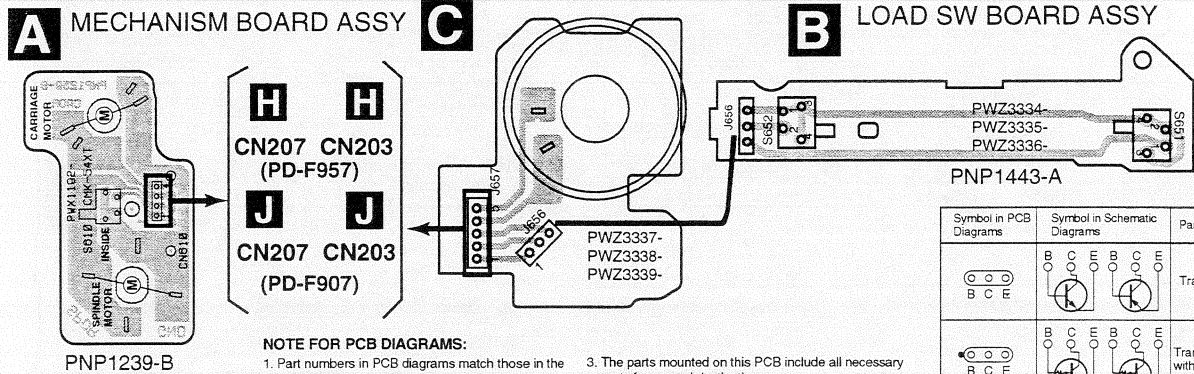




## 4. PCB CONNECTION DIAGRAM

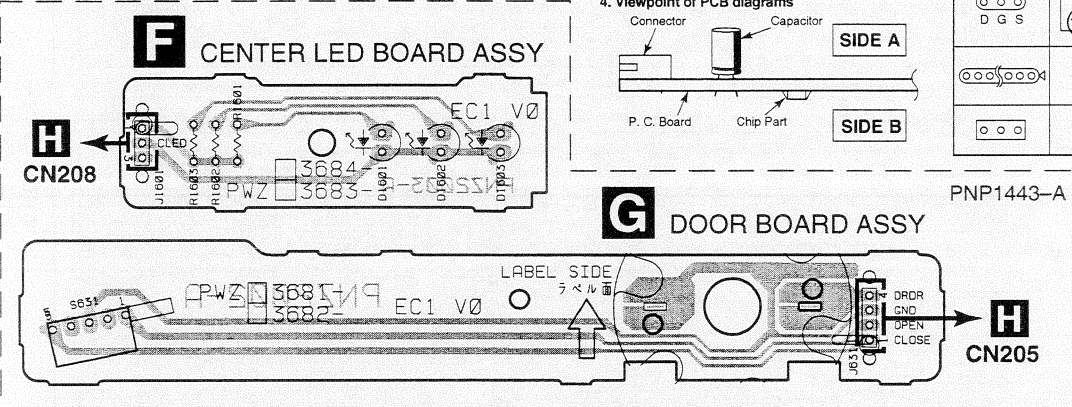
### 4.1 MECHANISM BOARD ASSY,SENSOR BOARD ASSY,LOAD SW BOARD ASSY,SELECT MOTOR BOARD ASSY,LOADING MOTOR BOARD ASSY,CENTER LED BOARD ASSY AND DOOR BOARD ASSY

#### LOADING MOTOR BOARD ASSY



Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

For PD-F957



## 4.2 MAIN BOARD ASSY (FOR PD-F957)

**- To PICKUP ASSY**

## SIDE A



**A**   
**CN610**

J11

**C**  
J657

B

C

**E**  
J601

**F**  
J160

**G**  
J631

**L**  
**CN70**

D

20

H

1

2

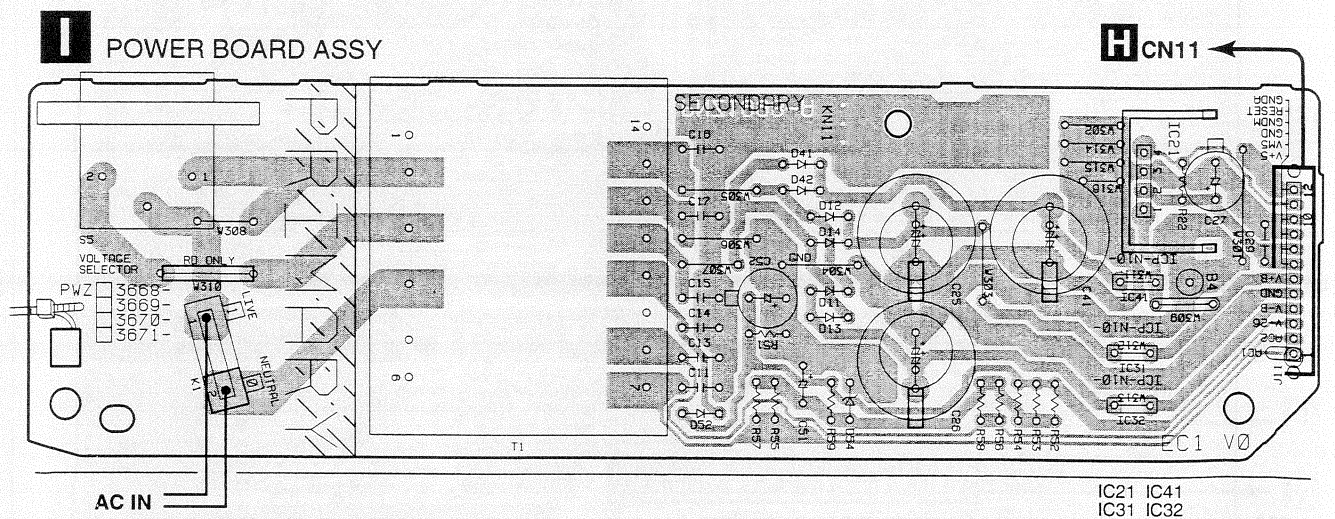
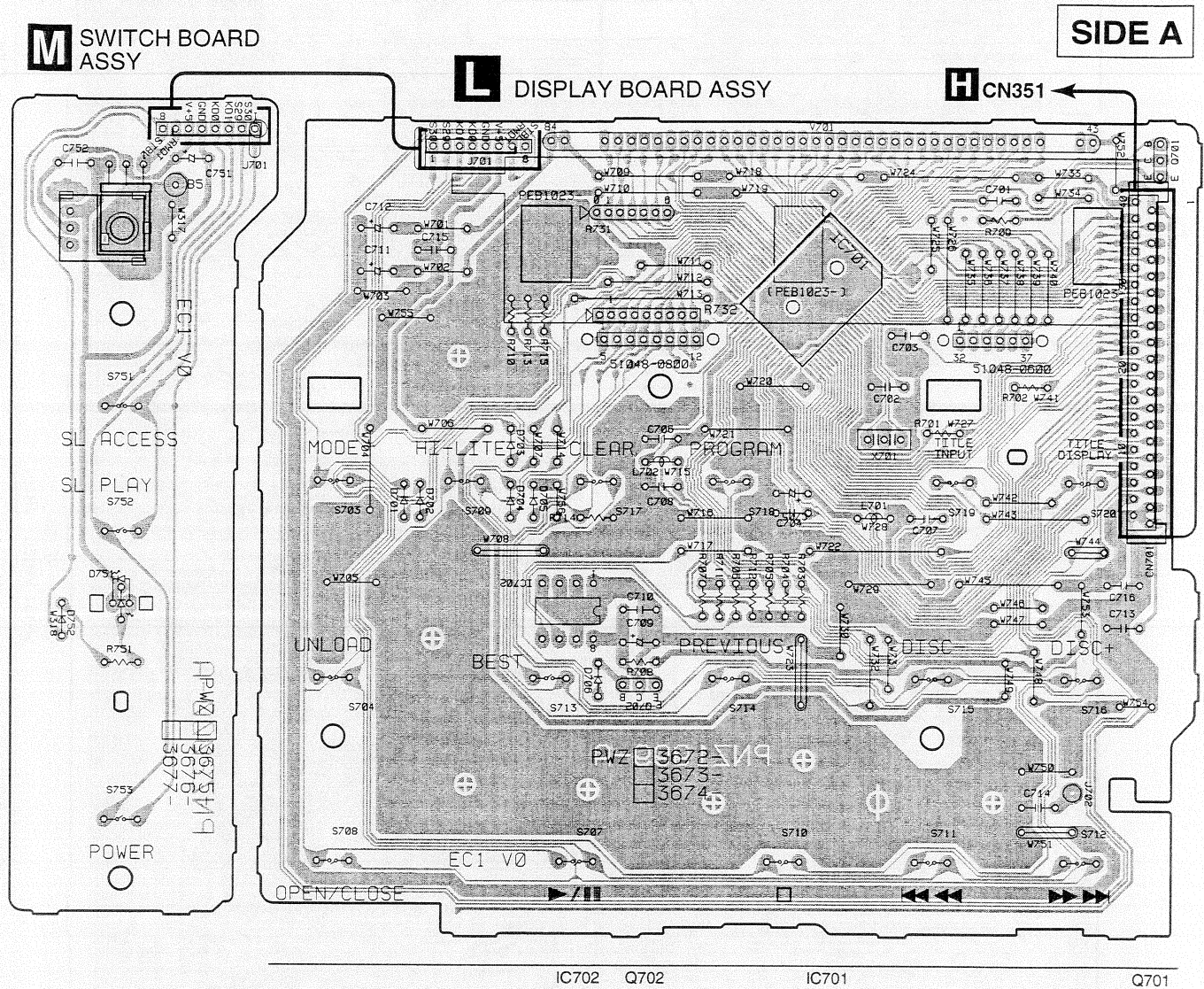
2

IC201	Q153	IC202	IC151	Q152	Q151
Q381	Q301	Q321	Q452	Q405	Q406
	Q322	Q341	IC405	Q451	Q403
			Q454	Q406	Q403
					Q453
					Q391

PNP1443-A



### 4.3 DISPLAY BOARD ASSY, SWITCH BOARD ASSY AND POWER BOARD ASSY (FOR PD-F957)



PNP1443-A



#### 4.4 MAIN BOARD ASSY(FOR PD-F907)

- To PICKUP ASSY

## SIDEA



**A**   
**CN610**

**K**  
J11

**C**  
J657

B

C

**E**  
J601

**F** J1601

**G** J631  
**N** CN70

D

VR152	VR156	VR153
VR151	VR155	VR154

IC151	Q152	Q151	Q391
Q452	Q405	Q404	
IC405	Q451	Q454	IC406
			Q403
			Q453

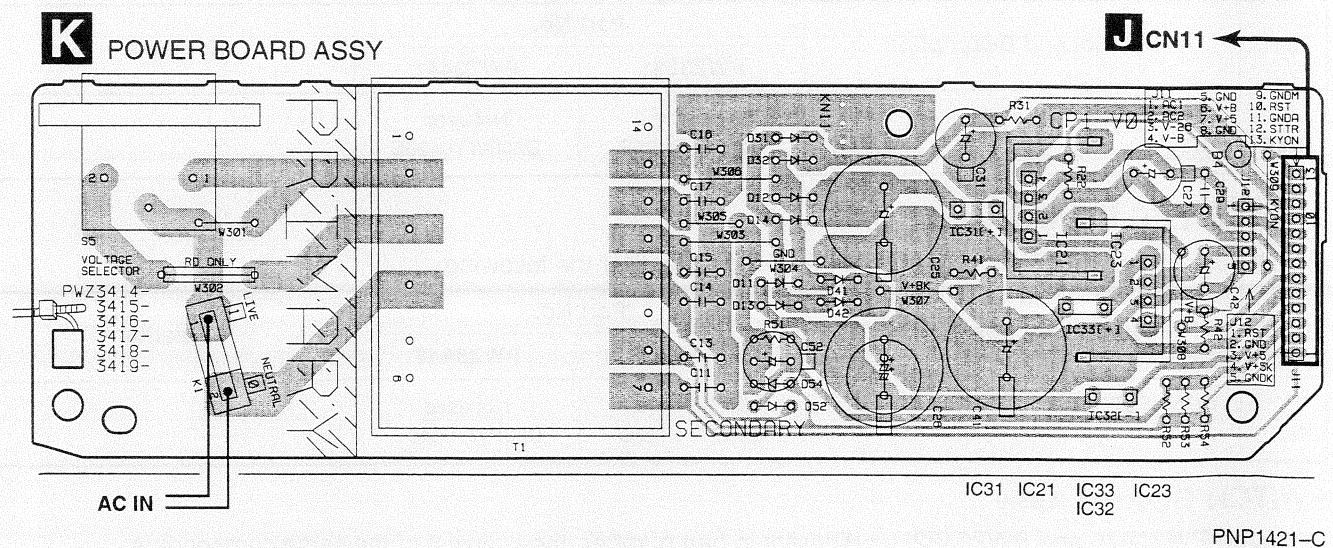
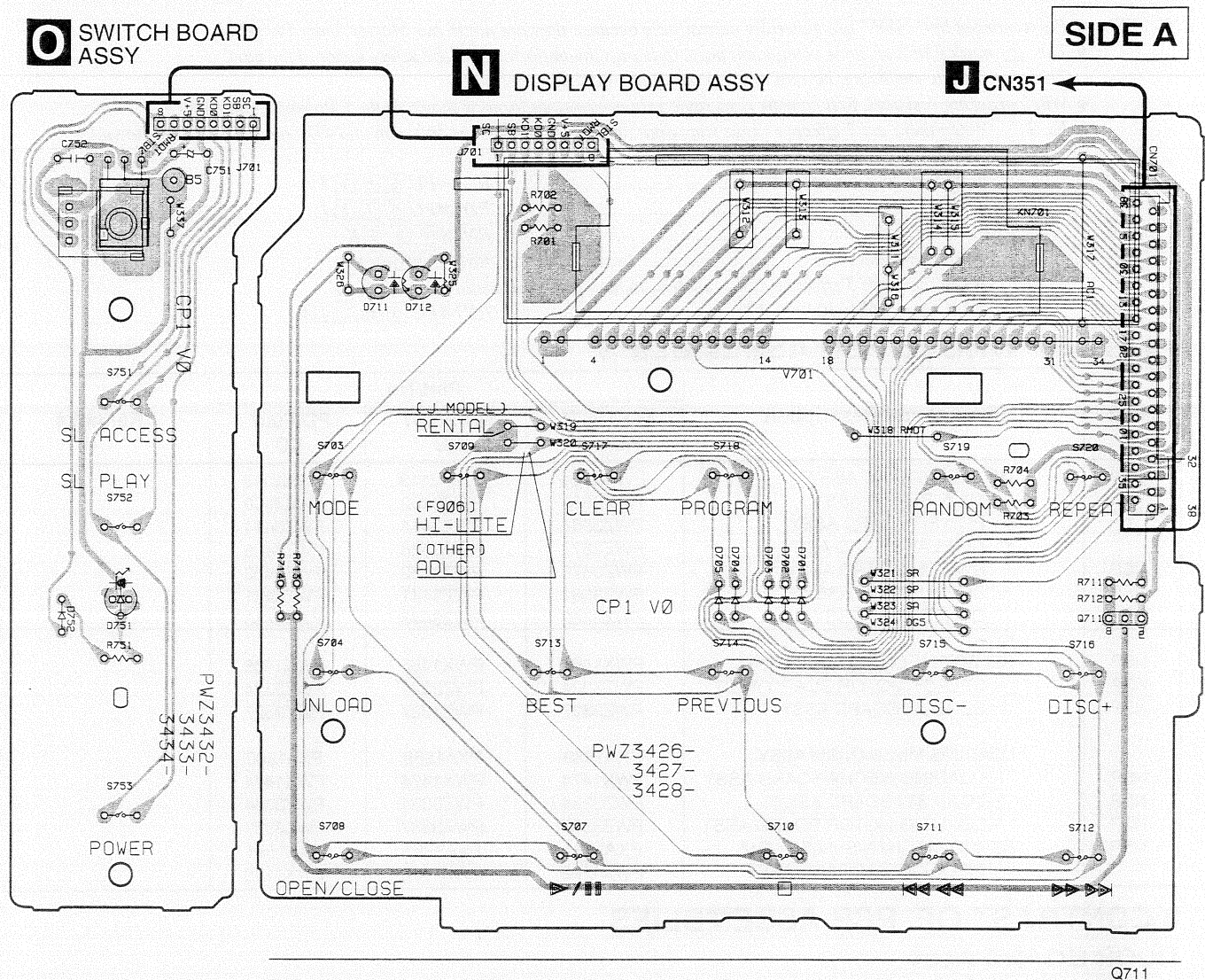
[illegible]

Q381 IC351  
Q371 Q372

PNP1421-C



# 4.5 DISPLAY BOARD ASSY, SWITCH BOARD ASSY AND POWER BOARD ASSY (FOR PD-F907)



## 5. PCB PARTS LIST

NOTES : ● Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.

● The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

● When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by  $J = 5\%$ , and  $K = 10\%$ ).

560  $\Omega \rightarrow 56 \times 10^1 \rightarrow 561$  ..... RD1/4PU  $\begin{matrix} 5 & 6 & 1 \end{matrix}$  J

47k  $\Omega \rightarrow 47 \times 10^3 \rightarrow 473$  ..... RD1/4PU  $\begin{matrix} 4 & 7 & 3 \end{matrix}$  J

0.5  $\Omega \rightarrow R50$  ..... RN2H  $\begin{matrix} R & 5 & 0 \end{matrix}$  K

1  $\Omega \rightarrow 1R0$  ..... RS1P  $\begin{matrix} 1 & R & 0 \end{matrix}$  K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k  $\Omega \rightarrow 562 \times 10^1 \rightarrow 5621$  ..... RN1/4PC  $\begin{matrix} 5 & 6 & 2 & 1 \end{matrix}$  F

### ■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.			Remarks
		PD-F957/ KU/CA	PD-F907/ KU	PD-F907 KC	
NSP	MOTHER BOARD ASSY	PWM2130	PWM2119	PWM2119	
$\triangle$	— MAIN BOARD ASSY	PWZ3663	PWZ3400	PWZ3400	
$\triangle$	— POWER BOARD ASSY	PWZ3668	PWZ3414	PWZ3414	
	— DISPLAY BOARD ASSY	PWZ3672	PWZ3426	PWZ3426	
NSP	— SWITCH BOARD ASSY	PWZ3675	PWZ3432	PWZ3432	
NSP	— DOOR BOARD ASSY	PWZ3681	PWZ3441	PWZ3441	
NSP	— CENTER LED ASSY	PWZ3683	PWZ3443	PWZ3443	
NSP	SELECT MECHA BOARD ASSY	PWX1465	PWX1465	PWX1465	
NSP	— SELECT MOTOR BOARD ASSY	PWZ3324	PWZ3324	PWZ3324	
NSP	— SENSOR BOARD ASSY	PWZ3327	PWZ3327	PWZ3327	
NSP	LOADING MECHANISM ASSY	PXA1589	PXA1589	PXA1589	
NSP	— LOADING MECHA BOARD ASSY	PWX1474	PWX1474	PWX1474	
NSP	— LOAD SW BOARD ASSY	PWZ3334	PWZ3334	PWZ3334	
NSP	— LOADING MOTOR BOARD ASSY	PWZ3337	PWZ3337	PWZ3337	
NSP	SERVO MECHANISM ASSY GM	PXA1591	PXA1591	PXA1591	
	— MECHANISM BOARD ASSY	PWX1192	PWX1192	PWX1192	

### ■ CONTRAST OF PCB ASSEMBLIES

#### DOOR BOARD Assy

PWZ3681 and PWZ3441 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		PWZ3681	PWZ3441	
NSP	CONNECTOR J631	51048-0400 D20PDY0425E	Not used D20PWY0425E	

#### CENTER LED BOARD Assy

PWZ3683 and PWZ3443 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		PWZ3683	PWZ3443	
NSP	CONNECTOR J1601	51048-0300 D20PDY0340G	Not used D20PWY0340G	

#### SWITCH BOARD Assy

Although PWZ3675 and PWZ3432 are different in part number, they consist of the same components.

## ■ PARTS LIST FOR PD-F957/KU/CA

Mark	No.	Description	Parts No.
------	-----	-------------	-----------

**H MAIN BOARD ASSY (PWZ3663)****SEMICONDUCTORS**

△ △	IC151	CXA1782CQ
	IC301	CXD2529Q
	IC203	LA6517
	IC201,IC202	LA6520
	IC302	LC89170M
	IC405	NJM4558DX
	Q151	2SA854S
	Q381,Q391	2SC1740S
	Q403,Q404	2SD2144S
	Q341	2SK246
	Q152,Q406	DTA124ES
	Q153,Q321,Q405	DTC124ES
	D1301-D1309,D1312-D1314,D321	1SS254
	D341,D391-D397	1SS254
	D218	MTZJ6.2B

**COILS AND FILTERS**

L391,L395,L396	LAU1R0J
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**CAPACITORS**

C181	CCCCH100D50
C341,C342	CCCCH120J50
C372,C373,C384,C385,C397	CCCSL101J50
C315	CCCSL221J50
C481,C482	CCCSL390J50
C356	CEAT100M50
C171,C175,C301,C302	CEAT101M10
C311-C314,C316,C322,C380	CEAT101M10
C433,C434	CEAT220M25
C131-C133,C211,C212	CEAT330M16
C169,C170	CEAT4R7M50
C309	CEATR47M50
C153-C155,C158,C172,C230	CFTLA104J50
C250,C321	CFTLA104J50
C157	CFTLA823J50
C156,C161,C164,C168,C218	CGCYX103K25
C160	CGCYX333K25
C152,C307	CGCYX473K25
C163	CKCYB102K50
C176,C306,C441,C442	CKCYB152K50
C305	CKCYB222K50
C162	CKCYB332K50
C167	CKCYB472K50
C151	CKCYB682K50
C159,C185,C205,C210,C215	CKCYF103Z50
C219,C304,C318,C323,C351	CKCYF103Z50
C355,C366,C371,C375	CKCYF103Z50
C381,C382,C387,C394,C398	CKCYF103Z50

**RESISTORS**

R189	RD1/4VM163J
R157	RD1/4VM274J
VR153,VR155 (10k Ω)	RCP1045
VR151,VR152,VR154 (22k Ω)	RCP1046
VR156 (220k Ω)	RCP1049

Mark	No.	Description	Parts No.
------	-----	-------------	-----------

Other Resistors

RD1/4PU□□□J

**OTHERS**

CN207	MT 4P CONNECTOR	173981-4
CN208	3P JUMPER CONNECTOR	52147-0310
CN205	4P JUMPER CONNECTOR	52147-0410
CN203	5P JUMPER CONNECTOR	52147-0510
CN204	7P JUMPER CONNECTOR	52147-0710
CN11	12P JUMPER CONNECTOR	52147-1210
JA394	I/O INTERFACE JACK	DKN1035
JA321	OPTICAL LINK OUT	GP1F32T
CN351	CONNECTOR	HLEM40S-1
JA401	JACK	PKB1032
JA393	JACK	PKN1005
X341	X TAL.RES.(16.9344MHz)	PSS1008
JA391,JA392	JACK	RKN1004
CN201	CONNECTOR 6P	RKP-533
CN202	CONNECTOR	SLW16S-1C7

SCREW PLATE

VNE1948

**I POWER BOARD ASSY (PWZ3668)****SEMICONDUCTORS**

△ IC31,IC32	ICP-N10
△ IC21	PQ05RR12
D54	MTZJ24B
△ D11-D14,D52	S5688G

**CAPACITORS**

C27	CEAT101M10
C52	CEAT101M35
C26	CEAT222M16
C11,C13,C15,C16	CKCYF103Z50
C25 (6800 μF/16V)	VCH1060

**RESISTORS**

Other Resistors RD1/4PU□□□J

**OTHERS**

J11	CONNECTOR	51048-1200
△	JUMPER WIRE	D20PDY1235E
△	POWER TRANSFORMER	PTT1342
△	TERMINAL	RKC-061

**L DISPLAY BOARD ASSY (PWZ3672)****SEMICONDUCTORS**

IC701	PD4934B
IC702	S-24C16ADP
Q701	DTC124ES
D701-D705	1SS254

**COILS AND FILTERS**

L701	LAU101J
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**SWITCHES AND RELAYS**

S703,S704,S707-S720	PSG1006
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## PD-F957,PD-F907

Mark	No.	Description	Parts No.
------	-----	-------------	-----------

### CAPACITORS

C712	CEAT100M50
C705,C709	CEAT101M10
C711	CEAT4R7M50
C708	CKCYF103Z50
C701,C704,C706,C707	CKPUYY103M16

### RESISTORS

Other Resistors	RD1/4PU□□□J
-----------------	-------------

### OTHERS

CONNECTOR	51048-0600
CONNECTOR	51048-0800
CN701 CONNECTOR	HLEM40R-1
V701 FL INDICATOR TUBE	PEL1095
X701 CERAMIC RES.(4.19MHz)	VSS1028

## M SWITCH BOARD ASSY

### SWITCHES AND RELAYS

S751-S753	PSG1006
-----------	---------

### CAPACITORS

C752	CKCYF103Z50
------	-------------

### OTHERS

REMOTE RECEIVER UNIT	GP1U27X
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## G DOOR BOARD ASSY

### OTHERS

CONNECTOR	51048-0400
REAF SWITCH	VSK1011

## F CENTER LED BOARD ASSY

### SEMICONDUCTORS

D1601-D1603	SLR-342YCT31
-------------	--------------

### RESISTORS

Other Resistors	RD1/4PU□□□J
-----------------	-------------

### OTHERS

CONNECTOR	51048-0300
J1601	D20PDY0340G

## E SELECT MOTOR BOARD ASSY

SELECT MOTOR BOARD assembly has no service part.

## D SENSOR BOARD ASSY

### SEMICONDUCTORS

Q601,Q602	DTC124ES
D601,D602	GP1S53V

### RESISTORS

Other Resistors	RD1/4PU□□□J
-----------------	-------------

## B LOAD SW BOARD ASSY

### SWITCHES AND RELAYS

S651,S652	VSG1006
-----------	---------

### OTHERS

J656 3P JUMPER WIRE	D20PWW0310E
---------------------	-------------

Mark	No.	Description	Parts No.
------	-----	-------------	-----------

## C LOADING MOTOR BOARD ASSY

LOADING MOTOR BOARD assembly has no service part.

## A MECHANISM BOARD ASSY

### SWITCHES AND RELAYS

S610	DSG1016
------	---------

### OTHERS

CN610 MT 4P CONNECTOR	173979-4
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## ■ PARTS LIST FOR PD-F907/KU/KC

Mark	No.	Description	Parts No.
------	-----	-------------	-----------

**J MAIN BOARD ASSY(PWZ3400)****SEMICONDUCTORS**

	IC151	CXA1782CQ
	IC301	CXD2519Q
⚠	IC203	LA6517
⚠	IC201,IC202	LA6520
⚠	IC371	NJM2930L05
	IC405	NJM4558DX
⚠	IC71	NJM79L05A
	IC351	PD4817A
	Q151	2SA854S
	Q381,Q391	2SC1740S
	Q403,Q404	2SD2144S
	Q341	2SK246
	Q152,	DTA124ES
	Q321,Q371,Q372,Q405	DTC124ES
	D218,D321,D341,D372,D373	1SS254

D391-D397,  
D374

**COILS AND FILTERS**

L391,L395,L396,L393

**CAPACITORS**

C181	CCCCH100D50
C341,C342	CCCCH120J50
C373 (0.047F)	ACH1246
C315	CCCSL221J50
C481,C482	CCCSL390J50

C171,C175,C301,C302  
C311-C314,C316,C322,C374  
C73  
C371  
C433,C434

C131-C133,C211,C212  
C376  
C351  
C169,C170,C356  
C309

C153-C155,C158,C230  
C250,C321  
C157  
C156,C161,C164,C168,C218  
C160

C152,C307  
C397  
C163  
C176,C306,C441,C442  
C305

C162  
C167  
C151  
C159,C185,C205,C210,C215  
C219,C304,C318,C323,366,C353

C354,C358,C362,C366  
C375,C399,C81

CEAS101M10  
CEAS101M10  
CEAS101M10  
CEAS1ROM50  
CEAS220M25

CEAS330M16  
CEAS470M10  
CEAS471M6R3  
CEAS4R7M50  
CEASR47M50

CFTXA104J50  
CFTXA104J50  
CFTXA823J50  
CGCYX103K25  
CGCYX333K25

CGCYX473K25  
CKCYB101K50  
CKCYB102K50  
CKCYB152K50  
CKCYB222K50

CKCYB332K50  
CKCYB472K50  
CKCYB682K50  
CKCYF103Z50  
CKCYF103Z50

CKCYF103Z50  
CKCYF103Z50

Mark	No.	Description	Parts No.
------	-----	-------------	-----------

**RESISTORS**

R189	RD1/4VM163J
R157	RD1/4VM274J
VR153,VR155 (10k Ω)	RCP1045
VR151,VR152,VR154 (22k Ω)	RCP1046
VR156 (220k Ω)	RCP1049

Other Resistors

RD1/4PU□□□□

**OTHERS**

CN207	MT 4P CONNECTOR	173981-4
CN208	3P JUMPER CONNECTOR	52147-0310
CN205	4P JUMPER CONNECTOR	52147-0410
CN203	5P JUMPER CONNECTOR	52147-0510
CN204	7P JUMPER CONNECTOR	52147-0710

CN11	12P JUMPER CONNECTOR	52147-1210
JA321	OPTICAL LINK OUT	GP1F32T
CN351	CONNECTOR	HLEM32S-1
JA401	JACK	PKB1032
JA393	JACK	PKN1005

X341	X TAL.RES.(16.9344MHz)	PSS1008
JA391,JA392	JACK	RKN1004
CN201	CONNECTOR 6P	RKP-533
CN202	CONNECTOR	SLW16S-1C7

	SCREW PLATE	VNE1948
X351	CERAMIC RES.(4.19MHz)	VSS1028

**K POWER BOARD ASSY (PWZ3414)****SEMICONDUCTORS**

⚠ IC21	PQ05RR12
D54	MTZJ18B/C
⚠ D11-D14,D31,D32,D52	S5688G

**CAPACITORS**

C27	CEAS101M10
C52	CEAS101M35
C26	CEAS222M16
C31	CEAS330M16
C11,C13,C15,C16	CKCYF103Z50

C25 (6800 μF/16V)	VCH1060
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**RESISTORS**

Other Resistors	RD1/4PU□□□□
-----------------	-------------

**OTHERS**

J11	D20PWY1235E
⚠	POWER TRANSFORMER
⚠	TERMINAL
	PTT1318
	RKC-061

**N DISPLAY BOARD ASSY (PWZ3426)****SEMICONDUCTORS**

D701-D705	1SS254
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**SWITCHES AND RELAYS**

S703,S704,S707-S720	PSG1006
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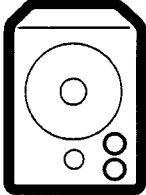
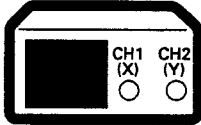
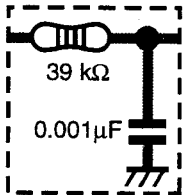
**OTHERS**

CN701	CONNECTOR	HLEM32R-1
V701	FL INDICATOR TUBE	PEL1089

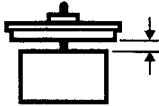
6. ADJUSTMENT

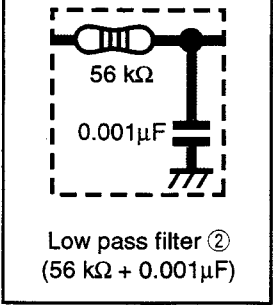
6.1 PREPARATIONS

6.1.1 Jigs and Measuring Instruments

 8 Cm DISC (With at last about 20 minutes recording)	 CD TEST DISC (YEDS-7)	 ⊖ screwdriver (small)	 ⊕ screwdriver (medium)	 ⊕ screwdriver (large)
 ⊖ Precise screwdriver	 Ball point hexagon wrench (size: 1.5mm) GGK1002	 Low-frequency oscillator	 Dual-trace oscilloscope (10 : 1 probe)	 Low pass filter ① (39 kΩ + 0.001μF)

6.1.2 Necessary Adjustment Points

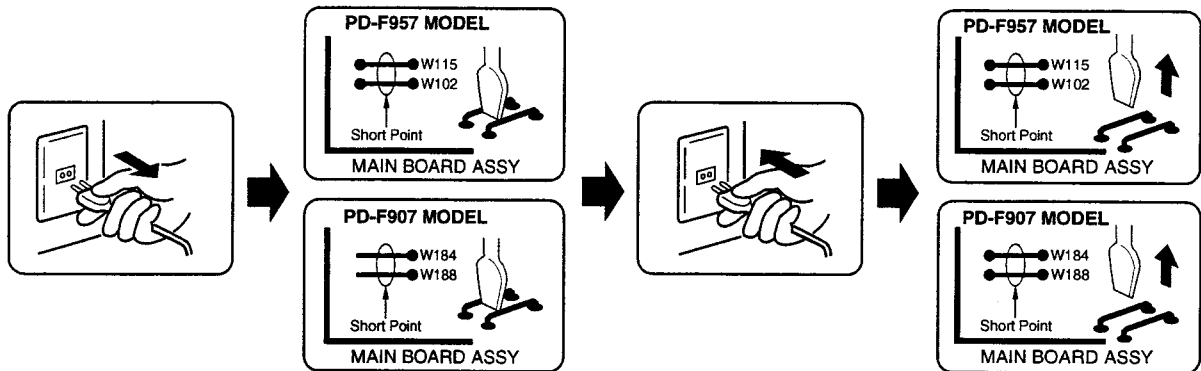
When	Adjustment points
Exchange PICKUP	1.2.3.4.5.6.7. 8.9.10.11.12 → Page 30 - 35
Exchange MAIN BOARD ASSY	1.3.5.6.7.8. 9.10.11.12 → Page 30 - 35
Exchange SERVO MECH ASSY	1.2.3.4.5.6.7. 8.9.10.11.12 → Page 30 - 35
Exchange SPINDLE MOTOR	 ADJ → Page 9



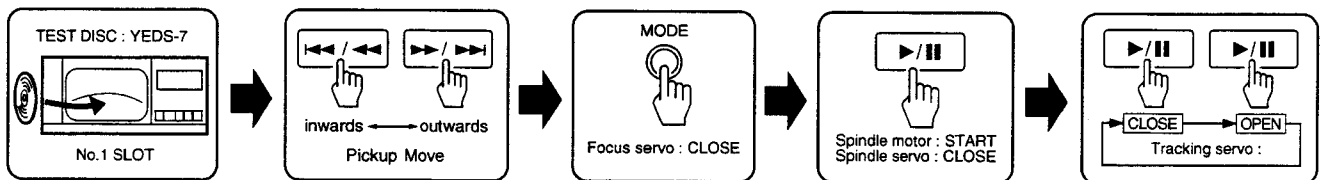
## 6.2 ADJUSTMENT

### 6.2.1 How to Start/Cancel Test Mode

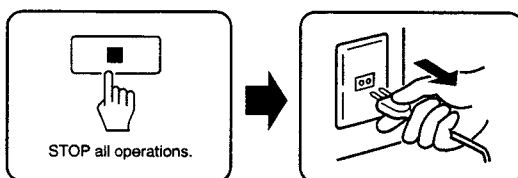
#### TEST MODE : ON



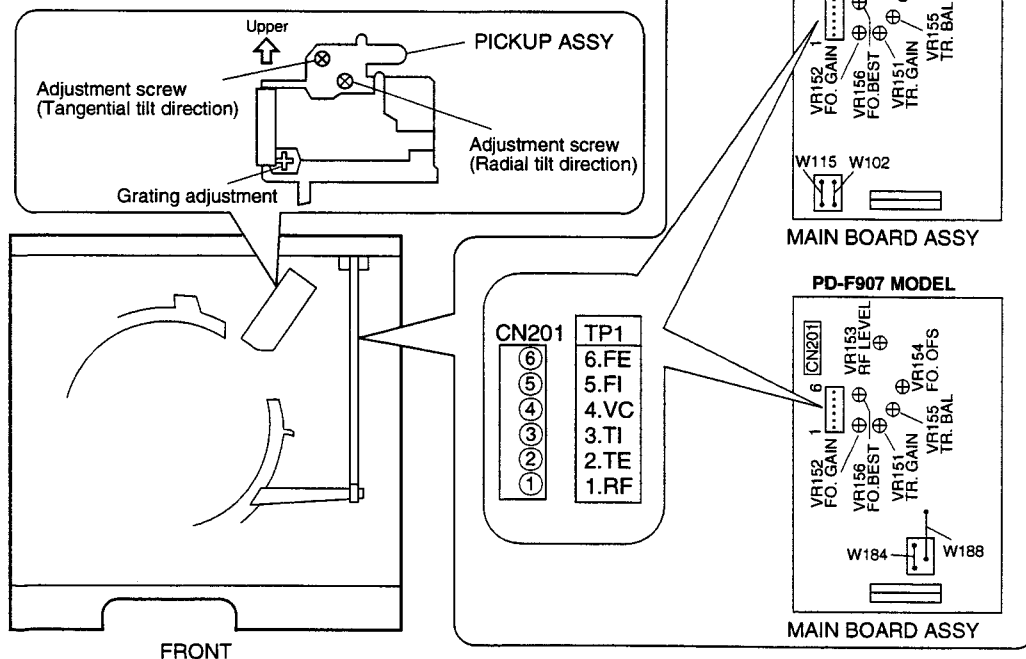
#### TEST MODE : PLAY



#### TEST MODE : STOP → CANCEL

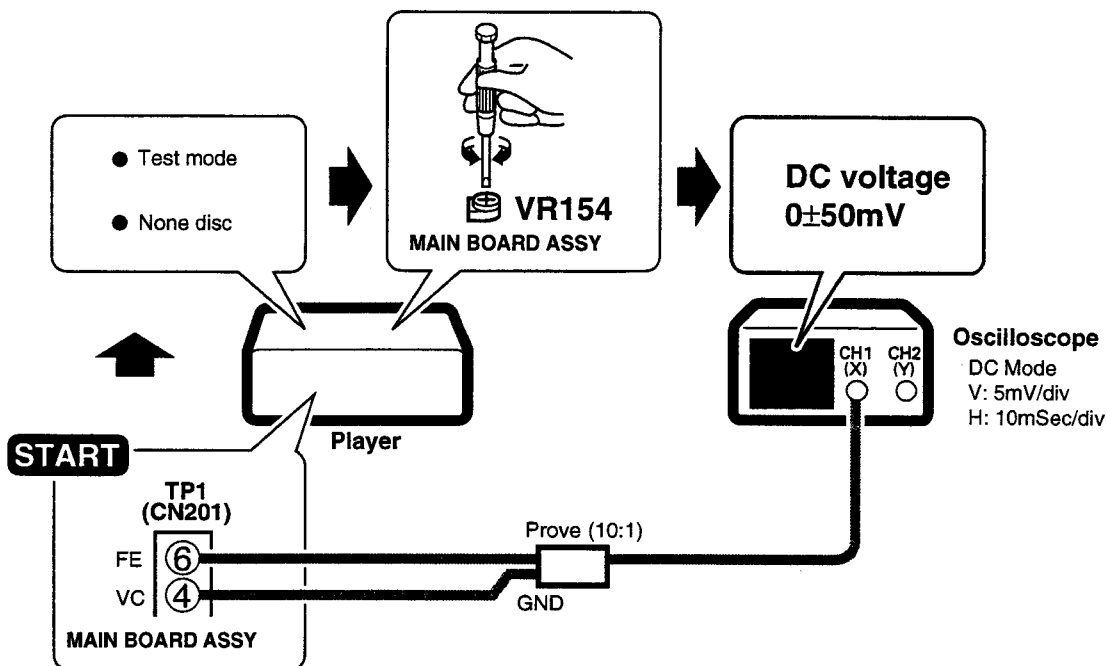


### 6.2.2 Adjustment Location

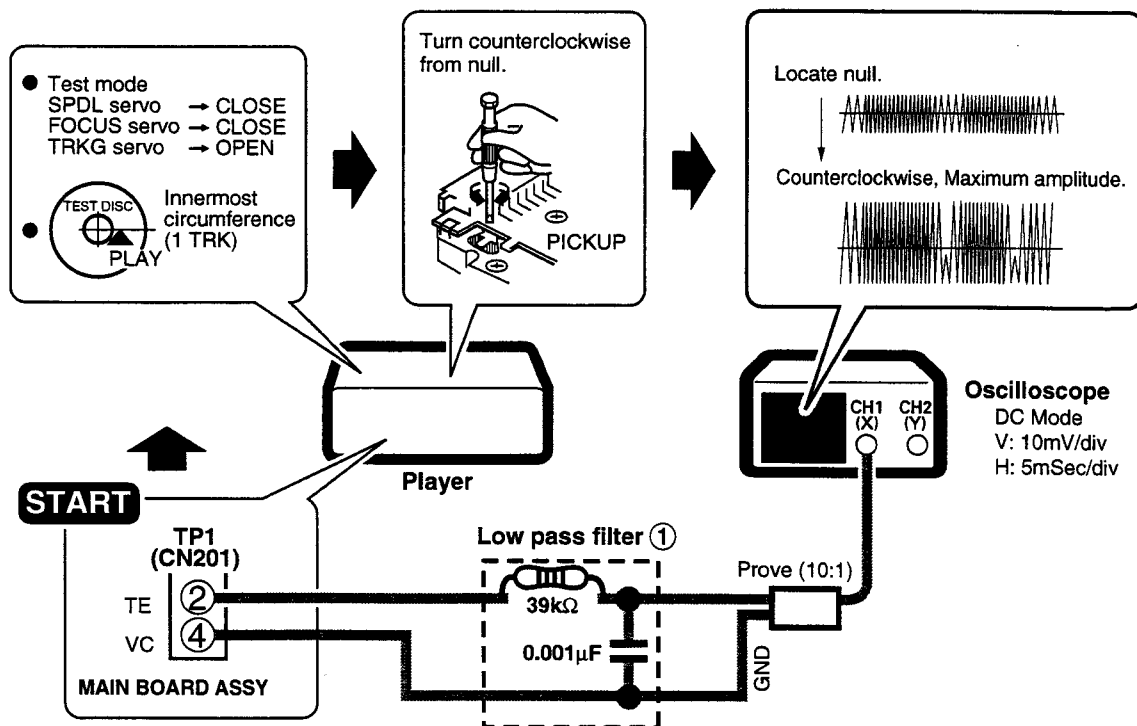


## 6.2.3 Check and Adjustment

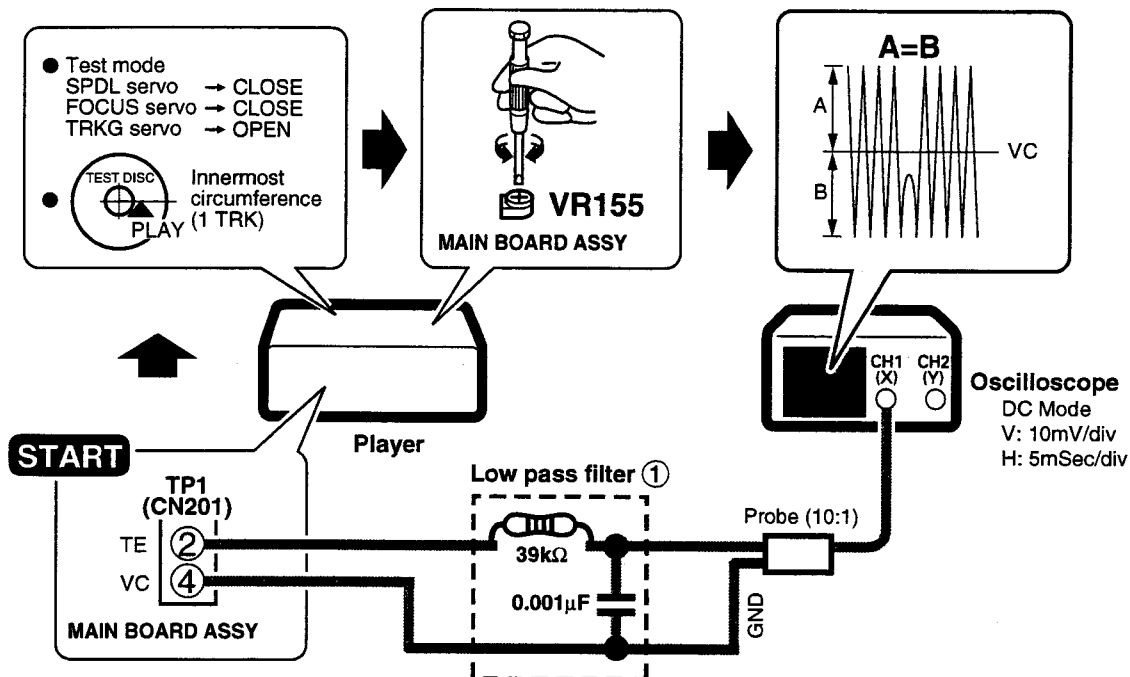
### 1. Focus Offset Adjustment



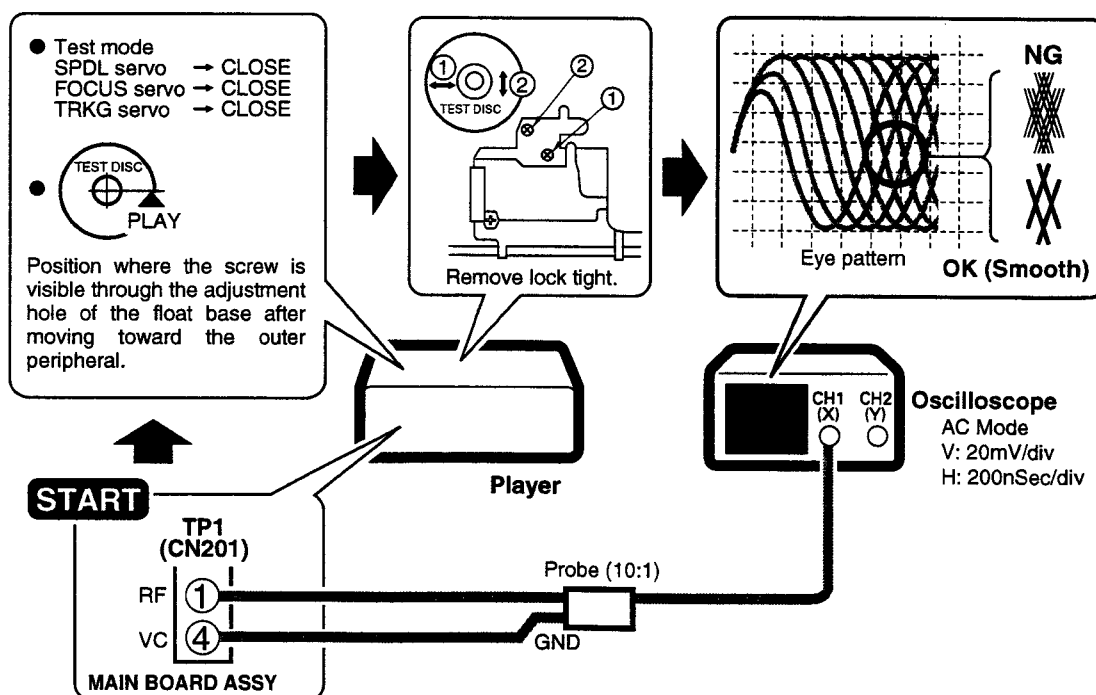
### 2. Grating Adjustment



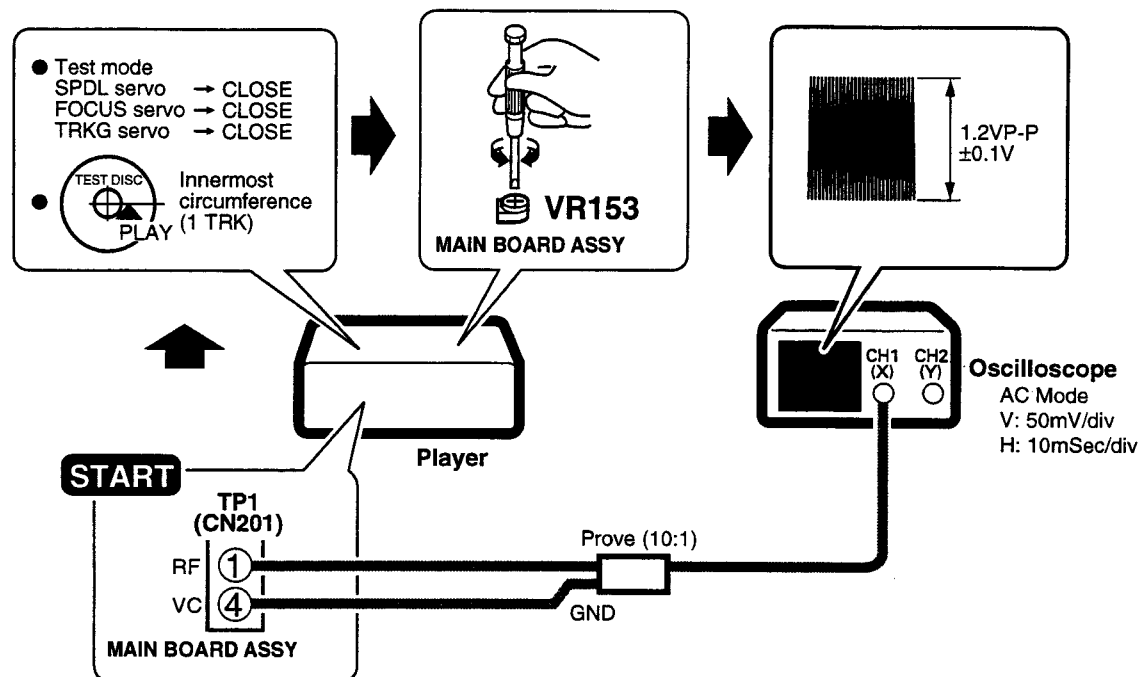
### 3. Tracking Error Barance Adjustment



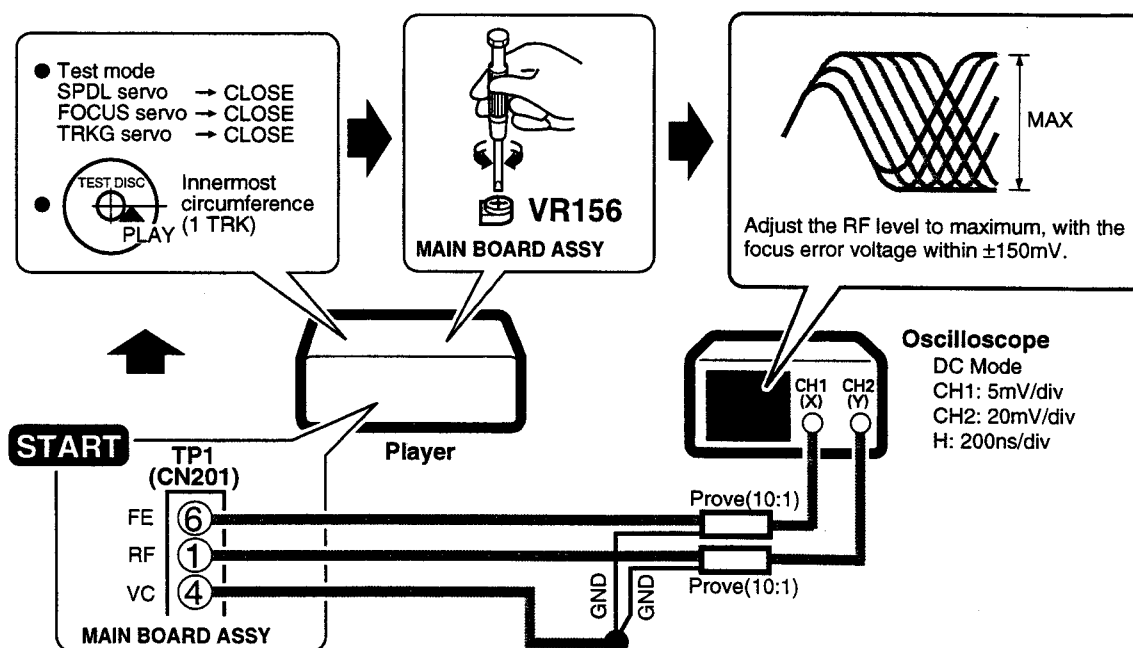
### 4. Pickup ①Radial/ ②Tangential Direction Tilt Adjustment



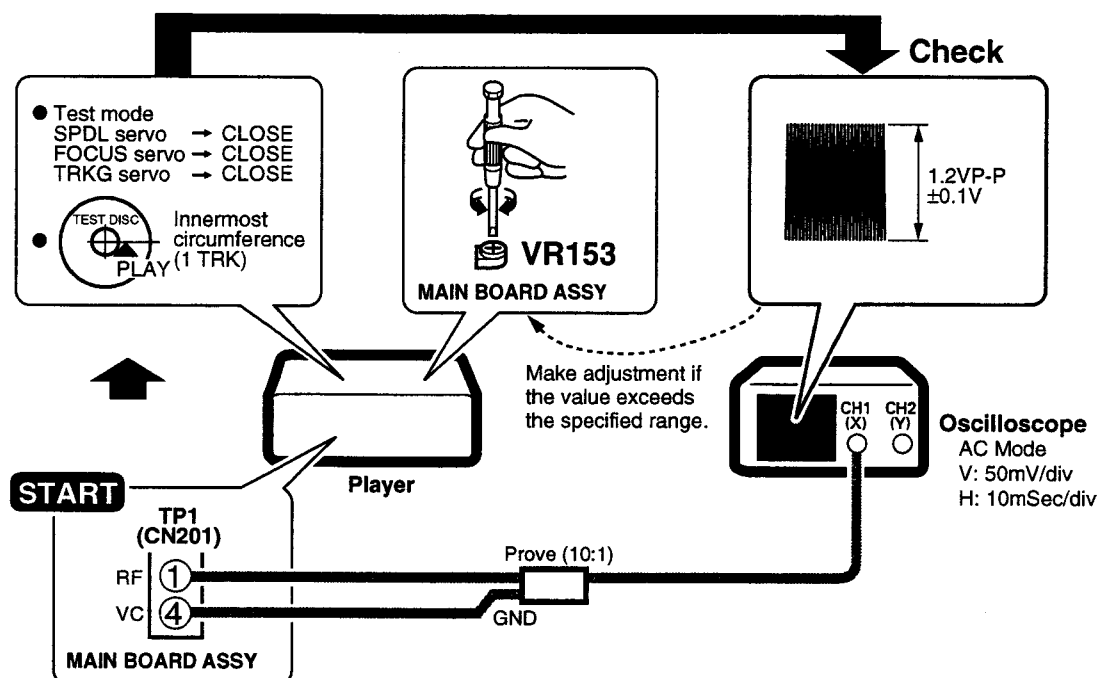
## 5. RF Level Adjustment I



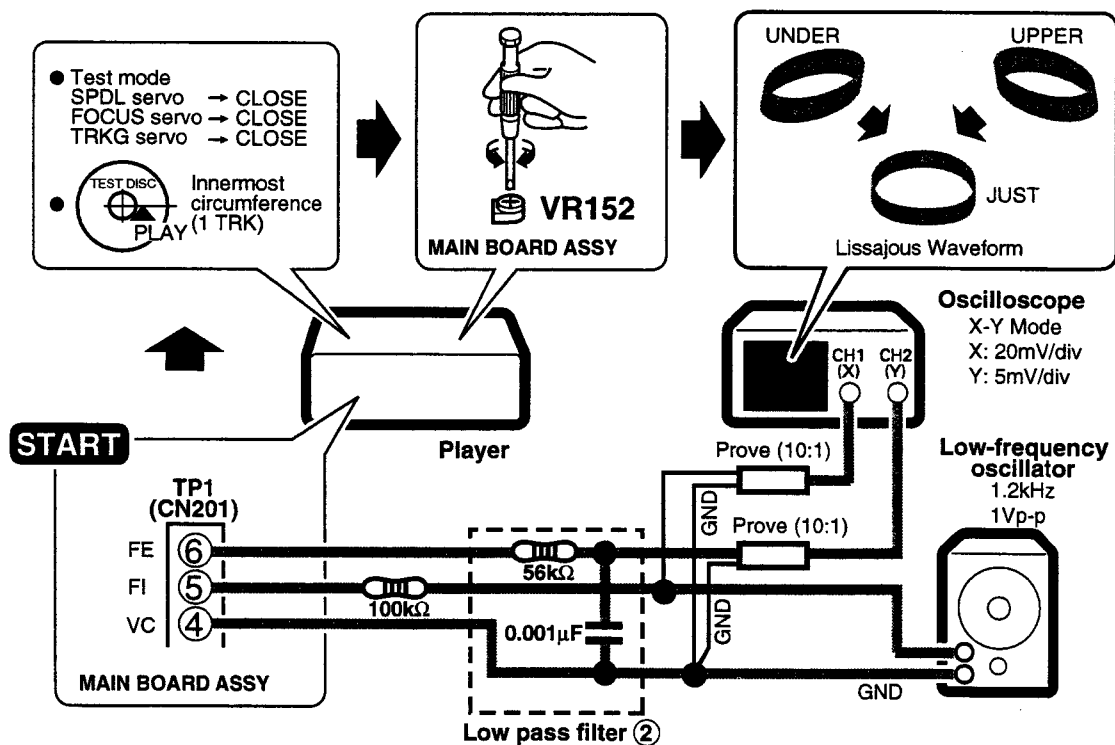
## 6. Focus Best Adjustment I



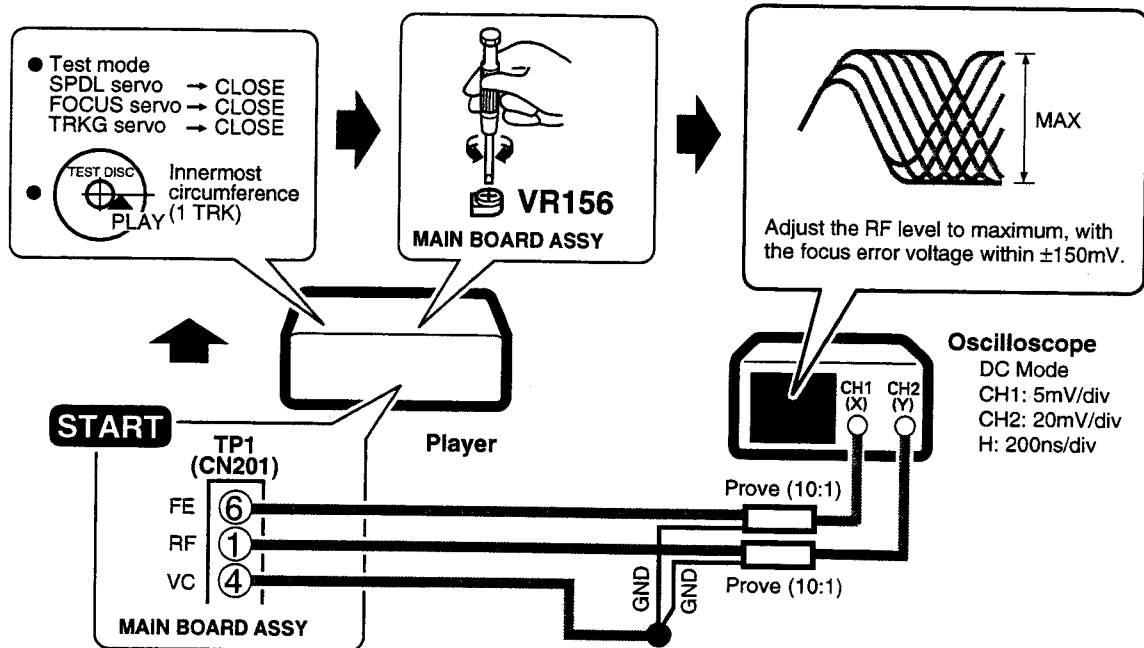
## 7. RF Level Adjustment II



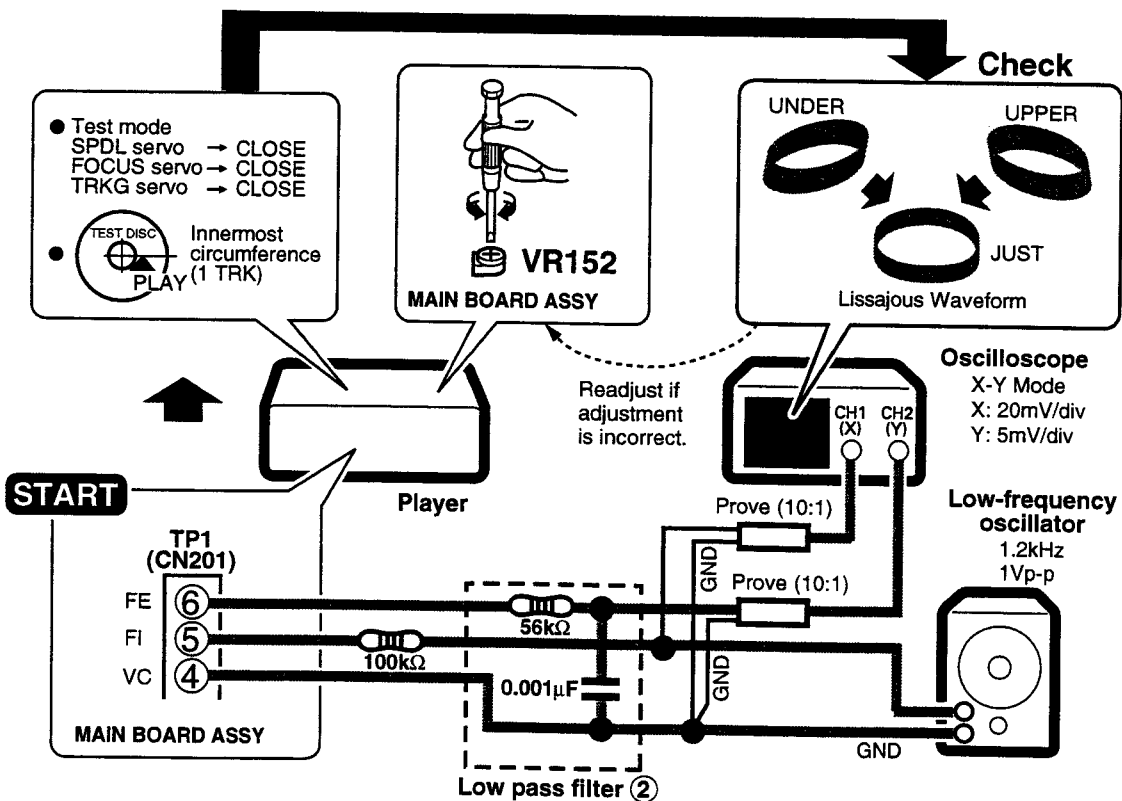
## 8. Focus Servo Loop Gain Adjustment I



## 9. Focus Best Adjustment II



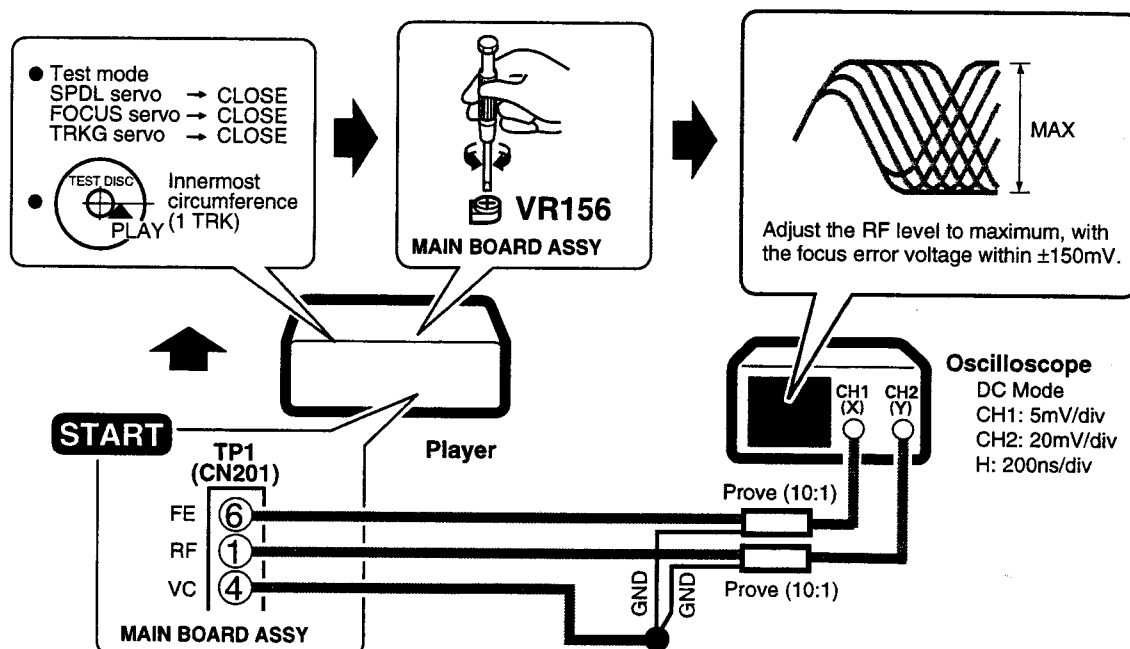
## 10. Focus Servo Loop Gain Adjustment II



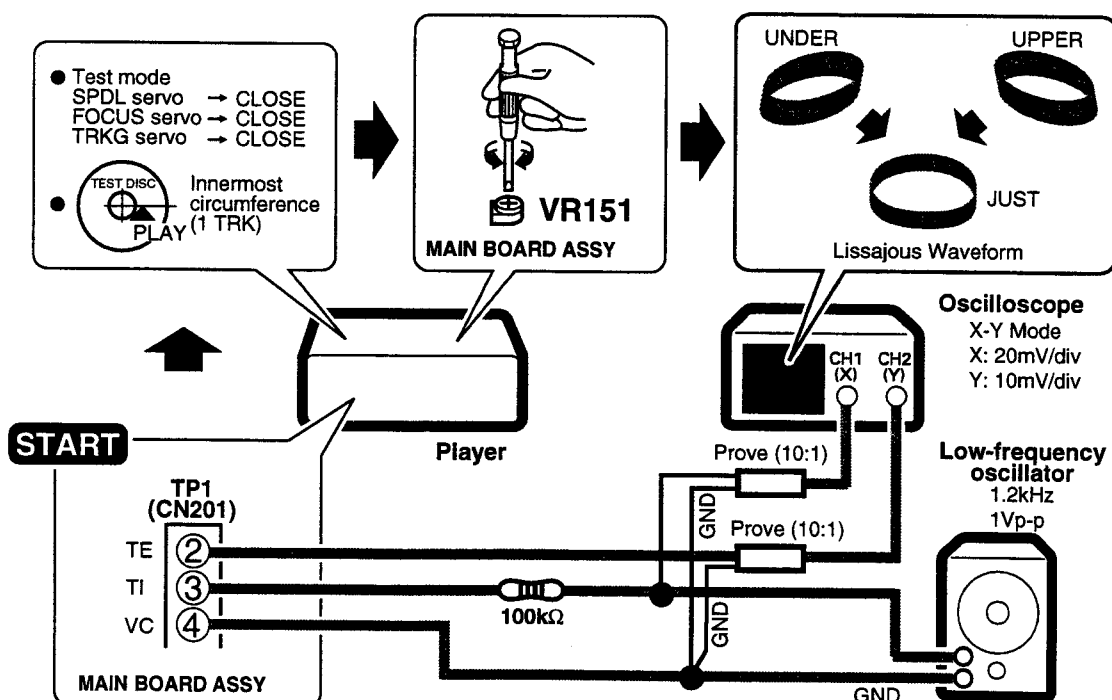


## 11. Focus Best Adjustment III

Adjust this point only if adjustment was made in item 10.



## 12. Tracking Servo Loop Gain Adjustment



## 7. GENERAL INFORMATION

### 7.1 PARTS

#### 7.1.1 IC

#### ■ PD4934B (IC701:DISPLAY BOARD ASSY)

#### ● SYSTEM CONTROL MICRO COMPUTER

#### ● Pin Function

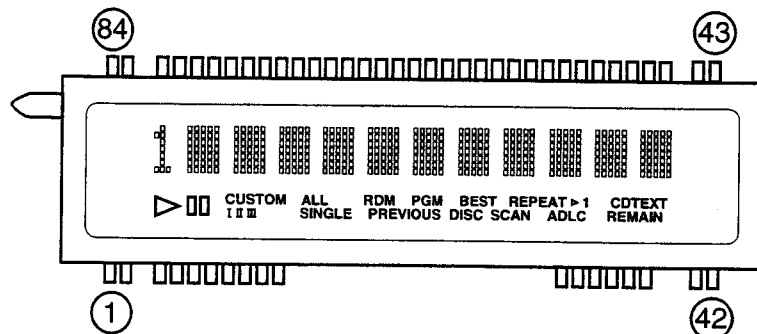
● The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
1	VDD	+5V	+5V	47	STBL	O	Standby - led /osce.
2	CLS	I	Hood open/close SW input.	48	KD3	I	Key data input.
3	OPEN	I	Open (CLS:H,OPEN:L),Close (CLS:L,OPEN:H)	49	KD2	I	
4	DCNT	I	Disc count pulse input.	50	KD1	I	
5	DPOS	I	Disc position detection pulse input.	51	KD0	I	
6	DSLT	O	Selector output. Count up(DSRT:L,DSLT:H) Count down(DSRT:H,DSLT:L) Stop(DSRT:L,DSLT:L)	52	S36	O	FL driving segment output.
7	DSRT	O		53	S35	O	
8	MCLS	O	Hood motor output. Open(MOPN:H,MCLS:L) Close(MOPN:L,MCLS:H) Stop(MOPN:L,MCLS:L)	54	S34	O	
9	MOPN	O		55	S33	O	
10	RESET	I	CPU Reset (L: RESET )	56	S32	O	
11	X2	-	Crystal connection for system clock oscillation :4.19MHz.	57	S31	O	
12	X1	-		58	S30	O	
13	IC	GND	GND	59	S29	O	
14	XT2	-	NC (OPEN)	60	S28	O	
15	GND	I	GND	61	S27	O	
16	VDD	+5V	+5V	62	S26	O	
17	CLOK	O	Serial clock.	63	S25	O	
18	MDAT	O	LSI control data.	64	S24	O	
19	SQSO	I	Serial input.(Q data/cok/gfs/sens/clmp/eject/insd )	65	S23	O	
20	XLAT	O	LSI control data latch pulse output.	66	S22	O	
21	XRST	O	Reset input for each LSI.	67	S21	O	
22	SCLK	O	CD TEXT timing data clock output.	68	S20	O	
23	-	O	L: output.	69	S19	O	
24	SRDT	I	CD TEXT data input.	70	S18	O	
25	AVSS	-	GND	71	S17	O	
26	LIN	O	Lauding motor output. IN(LIN:H,LOUT:L) OUT(LIN:L,LOUT:H) Stop(LIN:L,LOUT:L)	72	S16	O	
27	LOUT	O		73	S15	O	
28	CLED/TEST	I/O	Center LED control (ON:H , OFF:input)	74	S14	O	
29	DQSY	I	CD TEXT data input.	75	S13	O	
30	MUTB	O	Muting output (L:MUTE)	76	S12	O	
31	SYC3	O	Synchronous output.	77	S11	O	
32	SYC1	I	Synchronous input.	78	S10	O	
33	DLAT	O	DAC control data latch pulse output.	79	VLOAD	-26V	-26V
34	AVDD	+5V	+5V	80	S9	O	FL driving segment output.
35	AVREF	GND	GND	81	S8	O	
36	CNIN	I	C.OUT input.	82	S7	O	
37	TRST	O	CD TEXT decoder reset output. (L: reset)	83	S6	O	
38	SCOR	I	Subcode sync SO+S1 input.	84	S5	O	
39	RMDT	I	Remote control data input.	85	S4	O	
40	VSS	GND	GND	86	S3	O	
41	QSEL	O	Signal output for Q DATA expansion	87	S2	O	
42	MUTE	O	Muting output for expansion. (MUTE:H)	88	S1	O	
43	TRCH	O	Data serial output for expansion.	89	G12	O	
44	SCL	O	EEPROM clock output	90	G11	O	
45	SDA	I/O	EEPROM data IN/OUTPUT	91	G10	O	
46	VDD	+5V	+5V	92	G9	O	
				93	G8	O	
				94	G7	O	
				95	G6	O	
				96	G5	O	
				97	G4	O	
				98	G3	O	
				99	G2	O	
				100	G1	O	

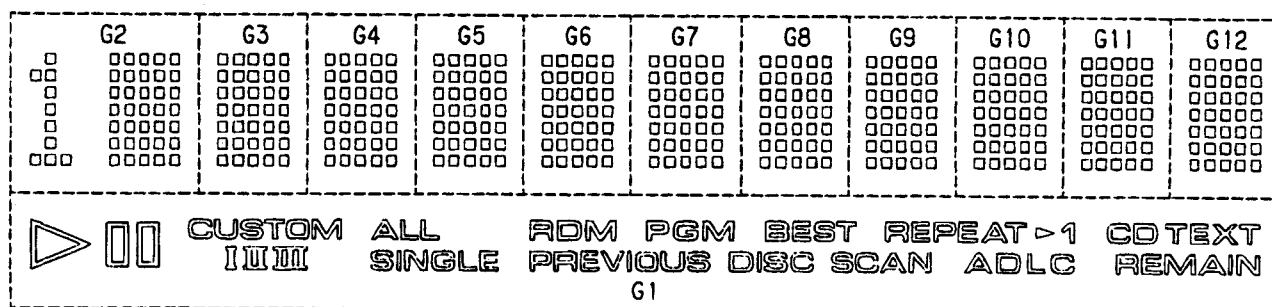
## 7.1.2 DISPLAY

### ■ PEL1095(V701: DISPLAY BOARD ASSY) :FOR PD-F957

#### ● Pin Assignment

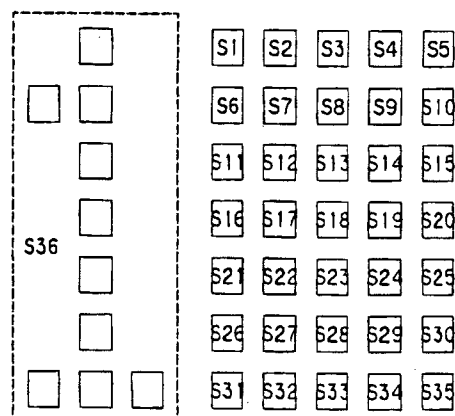


#### ● Anode Grid Assignment



	G1		G1
S17		S27	SINGLE
S18		S28	BEST
S19		S29	REMAIN
S20		S30	I
S21		S31	REPEAT
S22	CDTEXT	S32	PGM
S23	ADLC	S33	RDM
S24	SCAN	S34	ALL
S25	DISC	S35	CUSTOM
S26	PREVIOUS		

G2~G12



#### ● Pin Connection

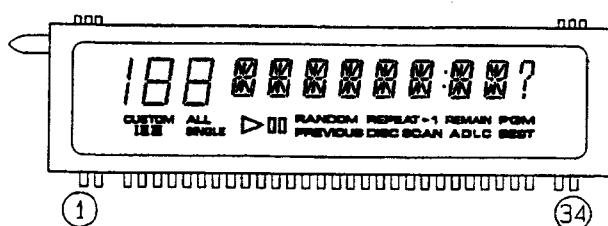
Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Assignment	NL	NL	NP	NP	S29	S30	S31	S32	S33	S34	S35	S36	NP	NP	NP	NP	NP	NP	NP	NP	NP
Pin No.	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Assignment	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	G1	G2	G3	G4	G5	G6	NP	NP	NP	NL	NL
Pin No.	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Assignment	F2	F2	NP	NP	G7	G8	G9	G10	G11	G12	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11
Pin No.	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
Assignment	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	NP	NP	F1	F1

F1,F2:Filament G1~G12:Grid S1~S36:Anode NP:No Pin NL:No Lead

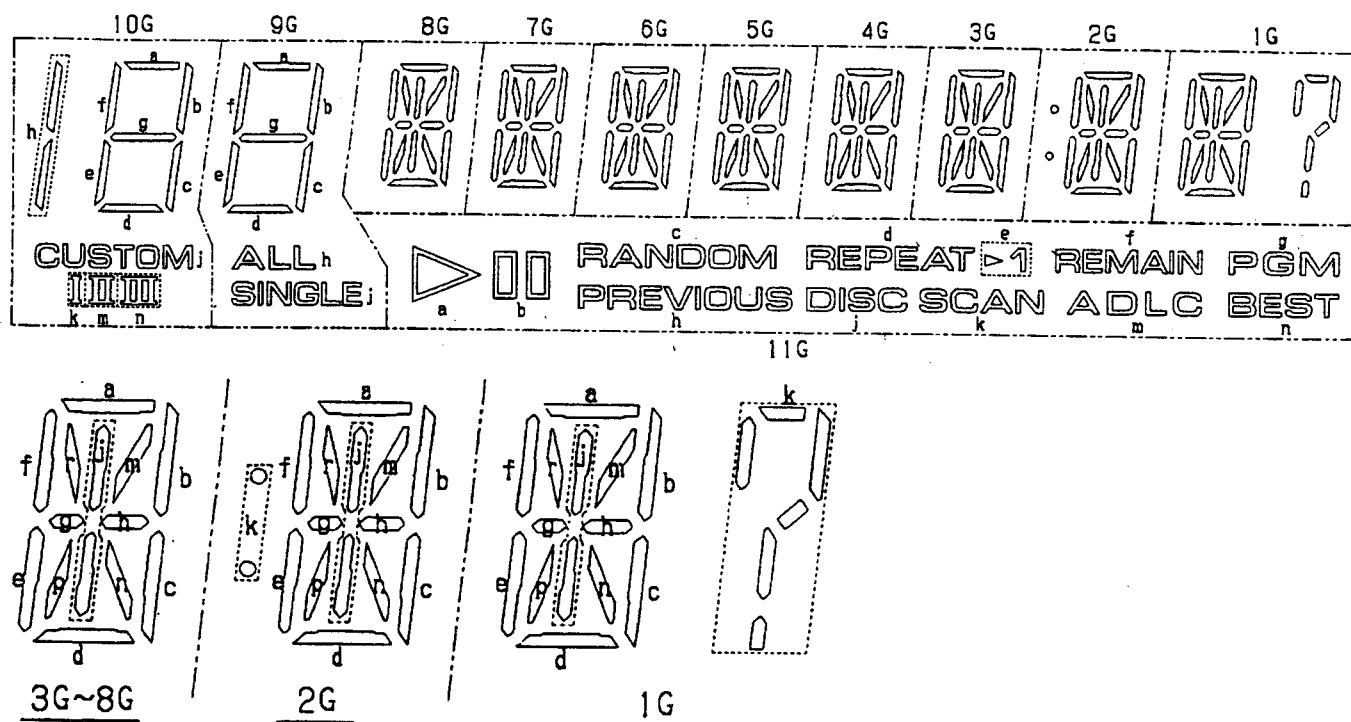
# PD-F957,PD-F907

## ■ PEL1089(V701: DISPLAY BOARD ASSY) :FOR PD-F907

### ● Pin Assignment



### ● Anode Grid Assignment



### ● Pin Connection

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Connection	F	F	NP	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NL	NL	NL	p	r	a

Pin No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Connection	b	c	d	e	f	g	h	j	k	m	n	NP	F	F

F:Filament 1G~11G:Grid a~h, j, k, m, n, p, r:Anode NP:No Pin NL:No Lead

## 7.2 DIAGNOSIS

### 7.2.1 ERROR CODE DISPLAY

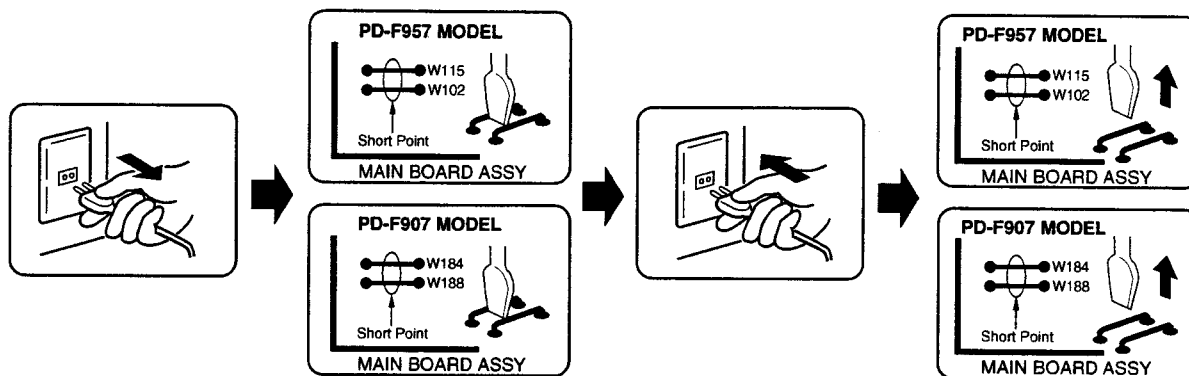
If a failure occurs in the Loading mechanism, the error symbol is automatically displayed on the fluorescent display screen of the front panel.

### 7.2.2 ERROR HISTORY AND DISPLAY

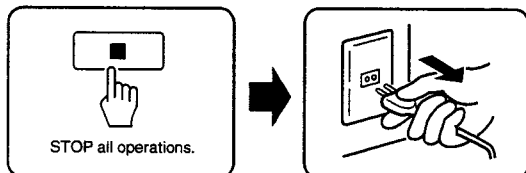
#### Error history display in test mode

The previously generated errors (NG processing) can be confirmed in the test mode. Since the has a backup function, the error history is memorized even if the power is turned off. (Memory holding time : About two days)

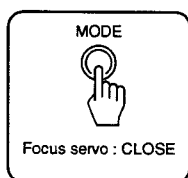
#### TEST MODE: ON



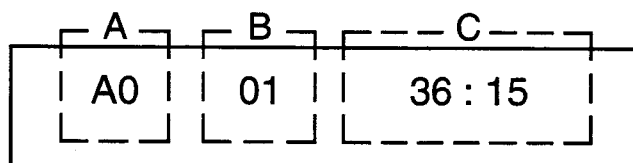
#### TEST MODE: STOP CANCEL



- Press the "BEST" button of the keys on the main body.



An error appears on the fluorescent indicator display by the above operation.



A: Disc No. : Error code  
 B: Track No. : Error sequence  
 C: Minute:second No. : Error generation mode  
 (Only 10's digit is valid.)

The previously generated 16 error codes (maximum) can be memorized. These error codes are displayed one at a time in the ascending order by pressing the "BEST" button again.

*Note :* A product performs fail safe operation when an error occurs. At that time, an error code is memorized by the fail safe operation after the error is eliminated.

## 7.2.3 ERROR HISTORY DISPLAY

### (1) Disc No. A : Detail of error code at portion

<Note> The user display appears only when the normal operation cannot be returned even if the fail safe operation is executed after each error occurs.

User	display	Description
None	A0	<ul style="list-style-type: none"> <li>A disc couldn't be detected for playback after loading because;               <ul style="list-style-type: none"> <li>No disc existed.</li> <li>A disc was turned upside down.</li> <li>A disc was dirty.</li> <li>A disc was loaded incompletely.</li> </ul> </li> <li>The focus got out of place during playback due to the crack and stain on the disc.</li> </ul>
None	A1	<ul style="list-style-type: none"> <li>The servo mechanism couldn't move to the desired tune position within a fixed time during selection of a tune from playback or during playback.</li> </ul>
U1	A3	<ul style="list-style-type: none"> <li>A disc couldn't be loaded within a fixed time. (A disc couldn't be carried from the rack block.)</li> </ul>
	A4	<ul style="list-style-type: none"> <li>A disc couldn't be unloaded within a fixed time. (A disc couldn't be returned to the rack block.)</li> </ul>
U2	A2	<ul style="list-style-type: none"> <li>The LOADING mechanism couldn't move to the desired disc position within a fixed time during selection of a disc from playback or during playback start from stop.</li> </ul>
	A5	<ul style="list-style-type: none"> <li>The LOADING mechanism couldn't be forcibly returned to the home position (left position when viewed from the front) within a fixed time after it is initialized or becomes NG.</li> </ul>
None	A6	<ul style="list-style-type: none"> <li>A disc couldn't be normally rotated for playback after loading because;               <ul style="list-style-type: none"> <li>A disc was turned upside down.</li> <li>A disc was dirty</li> <li>A disc was loaded incompletely.</li> </ul> </li> <li>A disc couldn't be normally rotated during playback due to the crack and stain on the disc.</li> </ul>

User	display	Description
None	A7	<ul style="list-style-type: none"> <li>Mechanism position just before the LOADING mechanism shifts to the disc selection operation when the DCNT pin is low. (The DCNT pin is usually high when the LOADING mechanism is in the stop state. The mechanism position is thus judged to have been shifted for some reason. The shifted mechanism position may cause a failure.)</li> </ul>
None	A8	<ul style="list-style-type: none"> <li>Discrepancy has occurred between the detected disc position and the current disc position during movement of the loading mechanism. (The system may incorrectly counted the waveforms of the DCNT and DPOS terminals. If counting is incorrect, the position of the disc No. displayed does not match the disc position counted.)</li> </ul>
None	A9	<ul style="list-style-type: none"> <li>Mechanism position during disc loading when the DCNT pin is low. (The DCNT pin is usually high when the LOADING mechanism is in the stop state. The mechanism position is thus judged to have been shifted for some reason. The shifted mechanism position may cause a failure.)</li> </ul>
None	AA	<ul style="list-style-type: none"> <li>The pickup block cannot return to the innermost circumference when the playback is Completed or another disc is shifted.</li> </ul>

#### Hood section

User	display	Description
U3	P0	The hood did not open within the specified time. The switch of the hood was malfunctioning.
	P1	The hood did not close within the specified time. The switch of the hood was malfunctioning.
	P2	The hood was attempted to be opened with force when it was completely closed. The switch of the hood was malfunctioning.

### (2) Track No. B : Error sequence in portion

The display of 1 to 16 appears. The low number indicates the recently generated error. The error whose number is "1" was generated most recently.

### (3) Minute : Second No. C : Detail of error generation mode in portion

Indicates the internal mode in which the displayed error is generated. The upper digit in "minute : second" has the meaning.

Digit of minute		Digit of second	
Display	Contents	Display	Contents
0 *	Spindle stop operation	0 *	During closing of the hood and when the hood is completely close
1 *	Disc return operation		
2 *	Disc selection operation		
3 *	Setup operation	1 *	During opening of the hood and when the hood is completely open
4 *	CD-R setup operation		
5 *	TOC read		
6 *	Track search operation		
7 *	Play		
8 *	Pause		
9 *	Manual search		

## 7.2.4 DISASSEMBLY

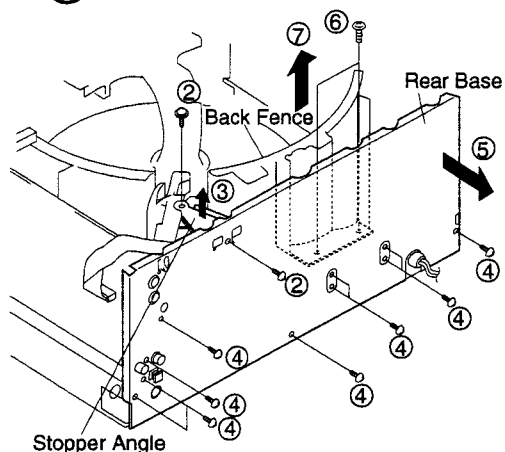
### ■ REMOVING THE LOADING MECHANISM ASSY

① Remove the Bonnet.

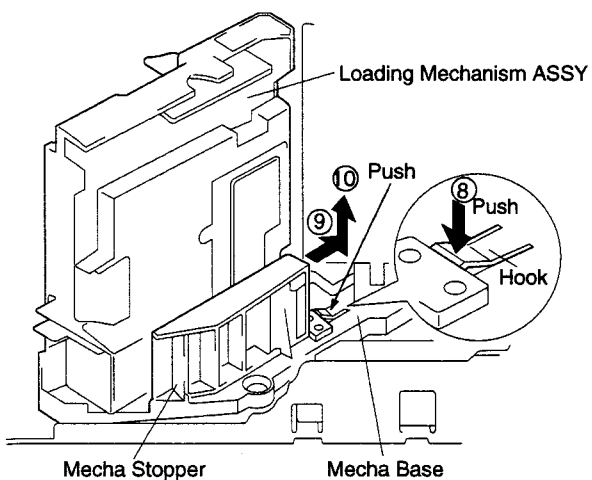
② – ③ Remove the Screws and Stopper Angle.

④ – ⑤ Remove the Screws and Rear Base.

⑥ – ⑦ Remove the Screws and Back Fence.

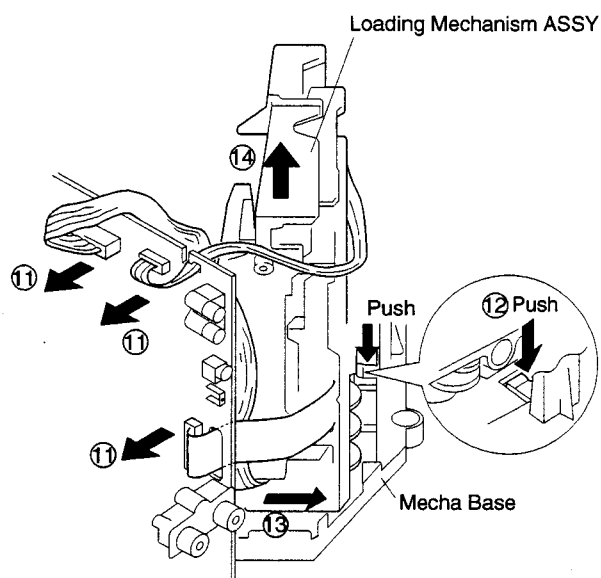


⑧ – ⑩ While holding down the hook of the Mecha Base, slide the Mechanism Stopper toward the right to pull up and remove the Mecha Stopper.



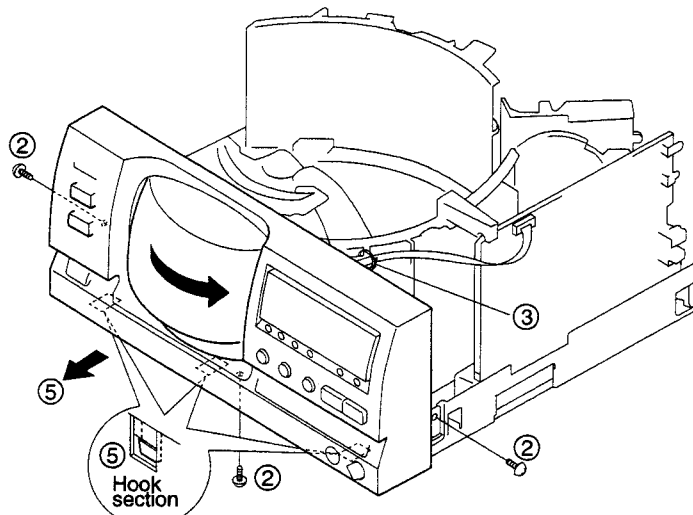
⑪ Remove the each wire.

⑫ – ⑭ While holding down the hook of the Mecha Base, slide the Loading Mechanism Assy to pull up and remove the Loading Mechanism Assy.



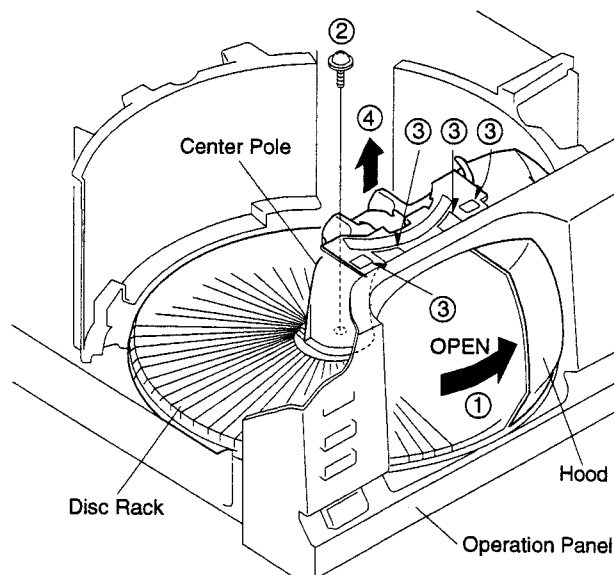
## ■ REMOVING THE OPERATION PANEL

- ① Remove the Bonnet.
- ② Remove the Screws.
- ③ Cut the Binder securing the wire material.
- ④ Remove the Center Pole. (Refer to the "REMOVING THE DISC RACK")
- ⑤ Shift the Front Panel slightly toward you while paying attention to the back side hooks on the Chassis.



## ■ REMOVING THE DISC RACK

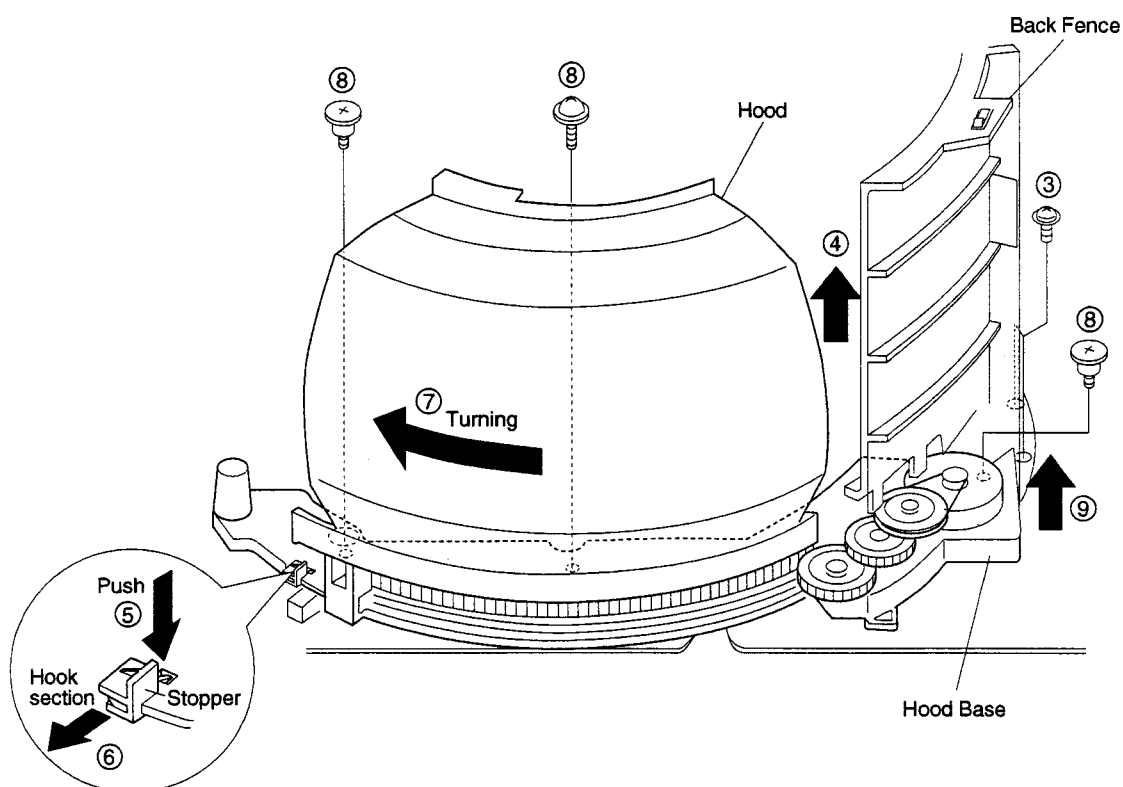
- ① Open the Hood.
- ② Remove the Screws.
- ③ - ④ Press the 4 hooks to remove the Center Pole from the Operation Panel.



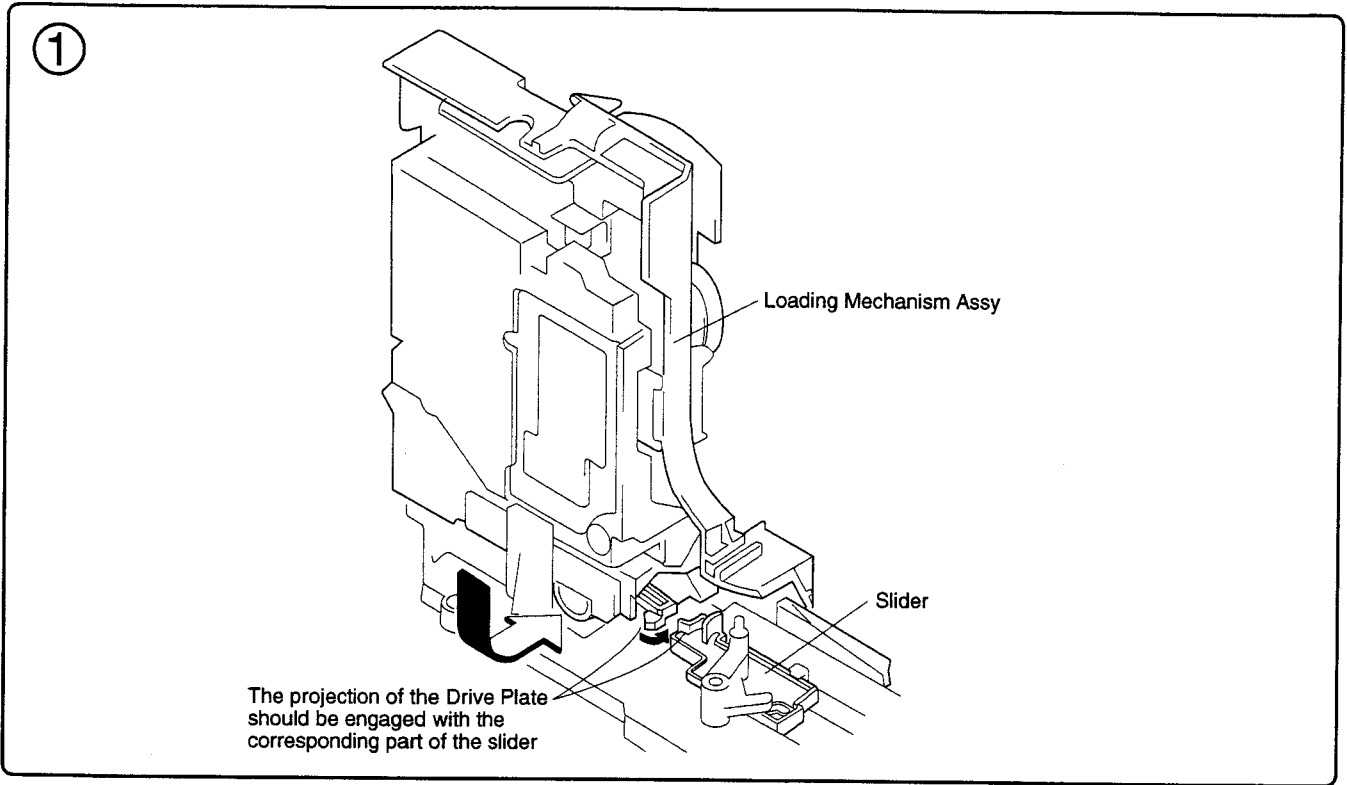


## ■ REMOVE THE HOOD AND HOOD BASE

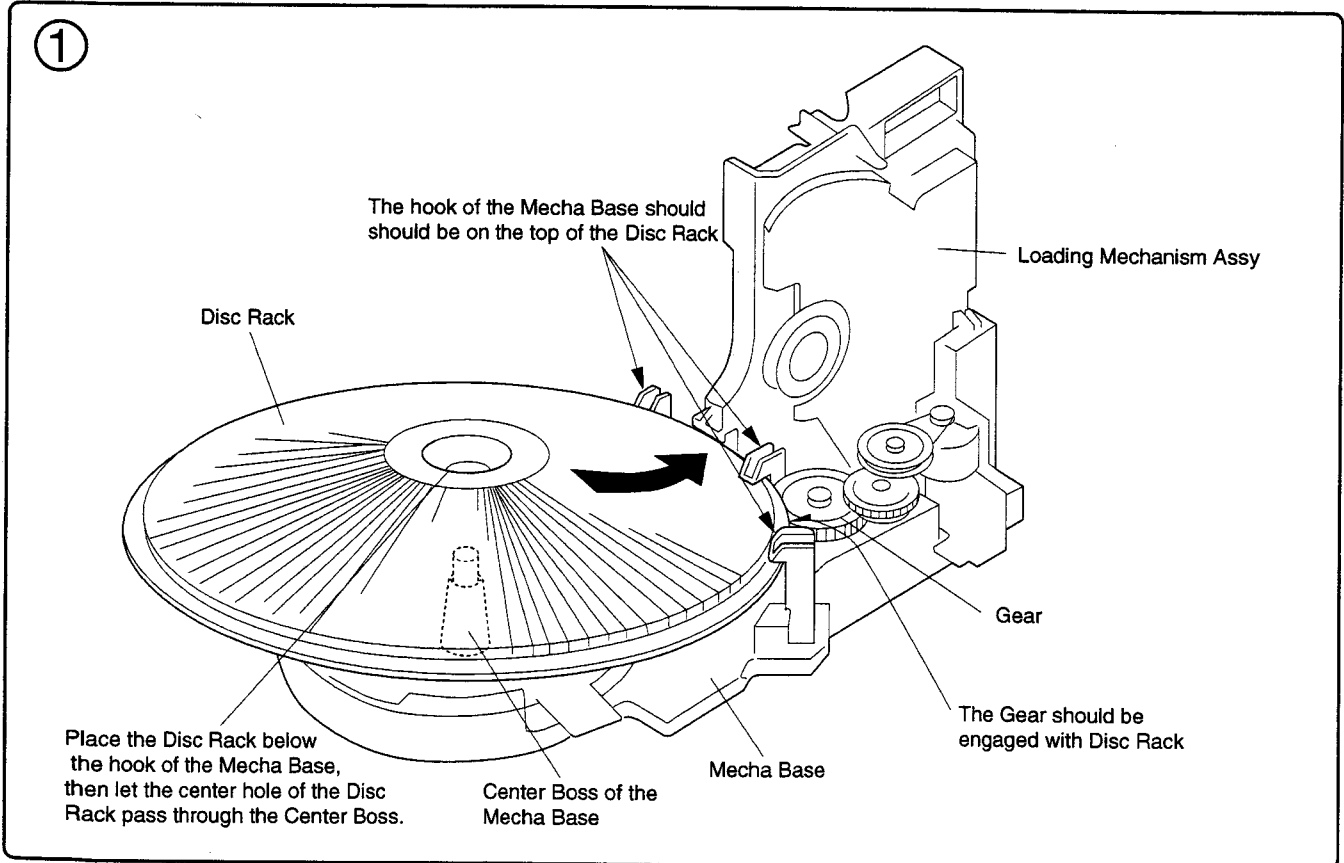
- ① Remove the Bonnet.
- ② Remove the Operation Panel. (Refer to the "REMOVING THE OPERATION PANEL")
- ③ Remove the Screws.
- ④ Remove the Back Fence.
- ⑤ - ⑦ Press the hook of the Stopper of the Hood Base to remove the Stopper. Slide the Hood toward the left to remove the Hood.
- ⑧ Remove the Screws.
- ⑨ Remove the Hood Base.



## ■ INSTALLING THE LOADING MECHANISM ASSY

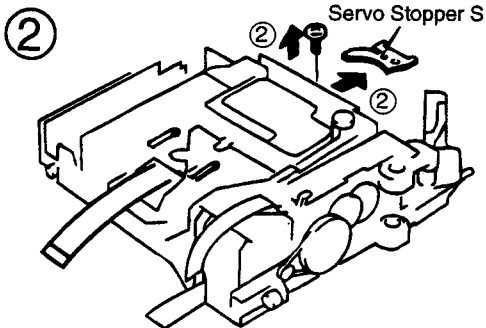
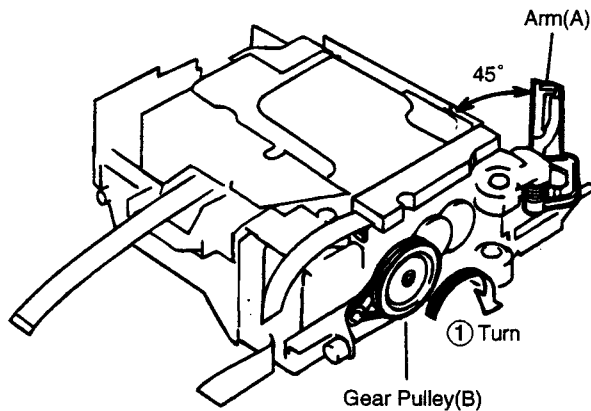


## ■ INSTALLING THE DISC RACK

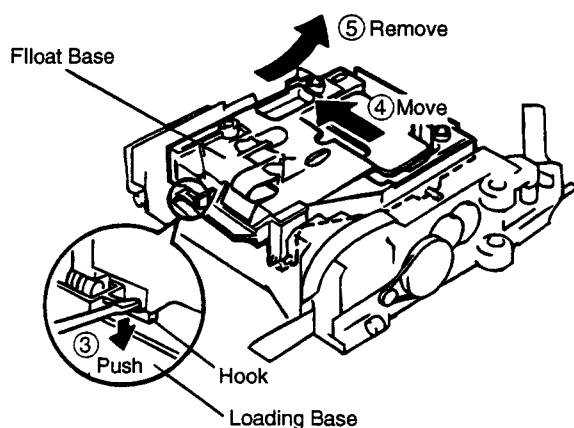


# ■ REMOVING THE SERVO MECHANISM ASSY GM

- ① Turn gear pulley (B) and position Arm (A) as shown below.

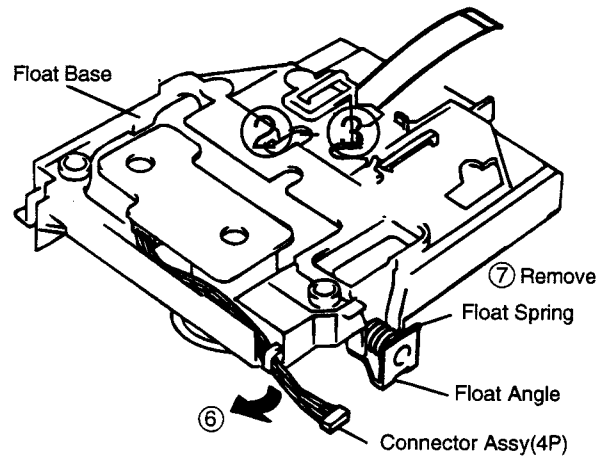


- ③ - ⑤ Slide the float base in the direction of the arrow ④ while pressing down on the loading base hook, and, lifting it gently, pull it out in the direction of the arrow ⑤.

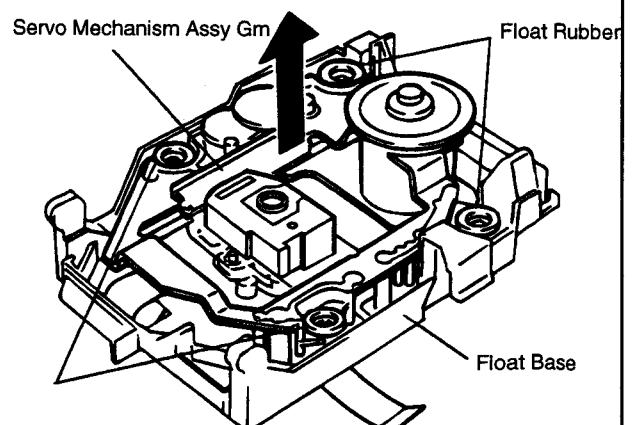


- ⑥ Remove the connector ASSY (4P) from the float base.

- ⑦ Remove the float spring. (To install this part, line up the float angle side of the Servo Mechanism ASSY GM first, and press down on the float base side.)



- ⑧ Remove the float rubber from the Servo Mechanism ASSY GM. At this time the float rubber should remain on the float base side. (To install it on the float base when it has been removed, push it into place with a thin cylindrical object.)

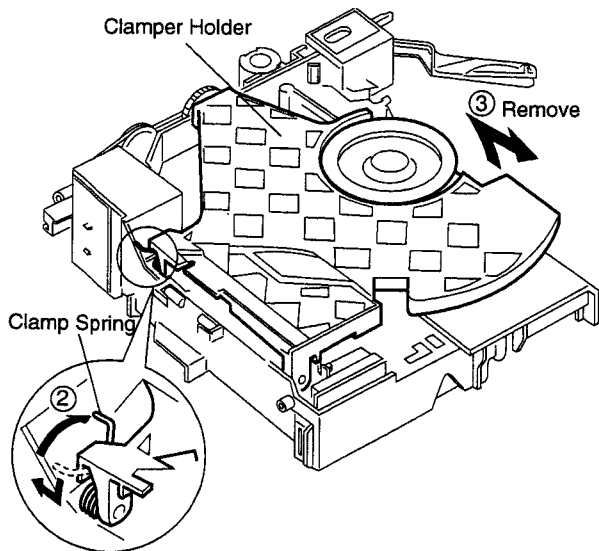


## ■ REMOVING THE ARM (A)

- ① Remove the float base together with the Servo Mechanism ASSY GM. (Refer to Steps ①-⑤ for “■ Removing the Servo Mechanism ASSY GM” .)

②-③

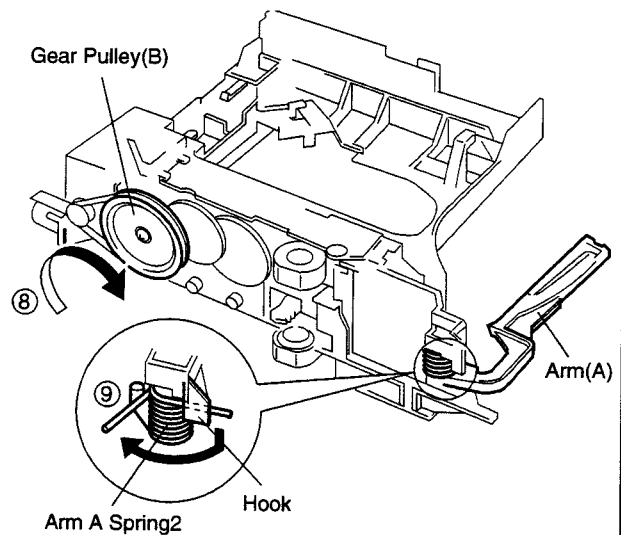
Remove the clamp spring and remove the clamber holder.



- ⑧ Turn gear pulley (B) and position Arm (A) as shown below.

- ⑨ Remove the Arm A spring2 from its hook.

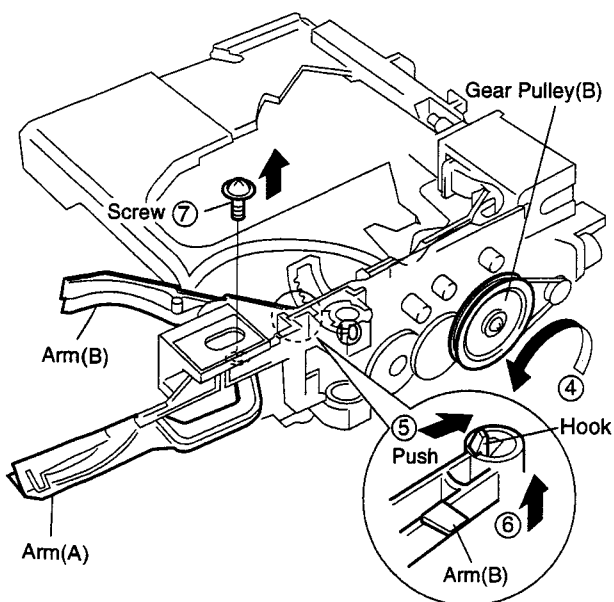
*Note: Do not hold the tip (blade) of arm (A) during operation.*



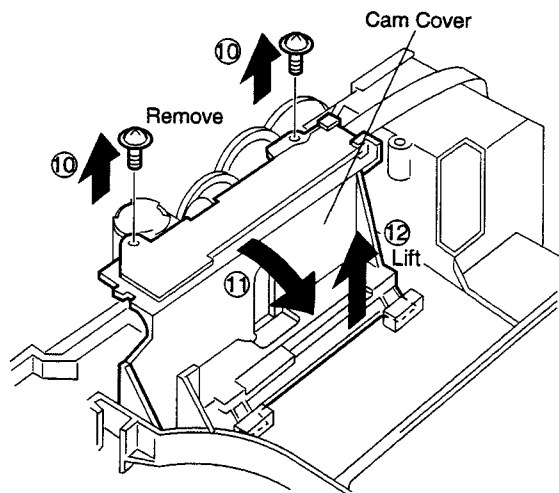
- ④ Turn gear pulley (B) and position Arm (A) as shown below.

- ⑤ ⑥ Remove Arm (B) while pressing the hook in the direction of the arrow.

- ⑦ Remove screw 7.



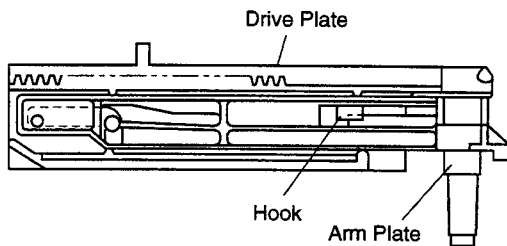
⑩-⑫



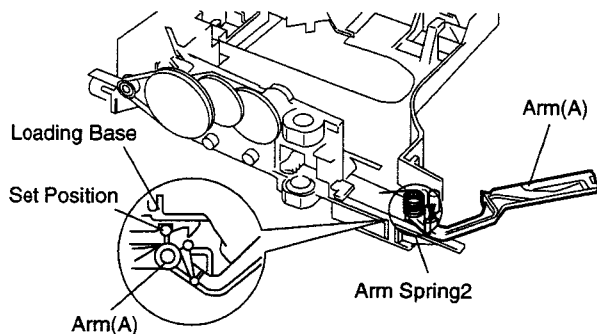
- ⑬ Remove drive plate, Arm plate, Arm A spring2 and Arm (A). (Refer to Steps 3-4 on page 47.)

■ **FOR REASSEMBLY, REVERSE THE DISASSEMBLY PROCEDURE, AND IN ADDITION CARRY OUT THE FOLLOWING ITEMS.**

- ① Assemble the arm plate as shown below, watching out for the drive plate hook.

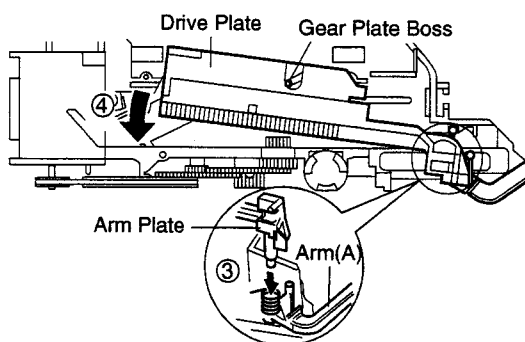


- ② Place Arm (A) and the Arm A spring<sup>2</sup> on the loading base, being careful to keep them in the position shown below.

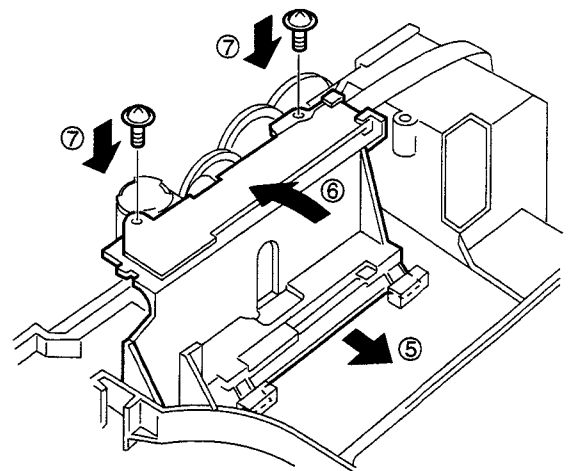


- ③ Set the drive plate and arm plate, which were assembled in Step ①, on the Arm (A) side as shown below. At this time be careful to keep Arm (A) in the position described in Step ②.

- ④ Insert the gear plate boss into the drive plate groove and pull it toward you.



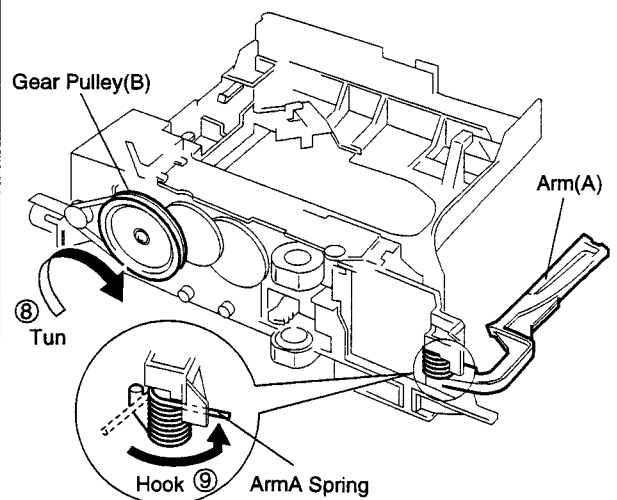
- ⑤ - ⑦

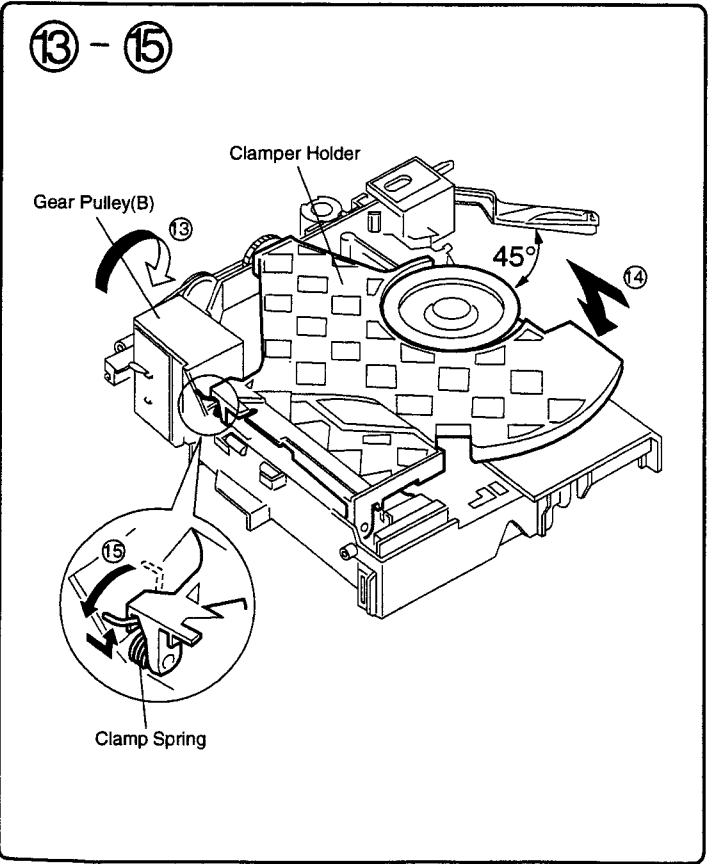
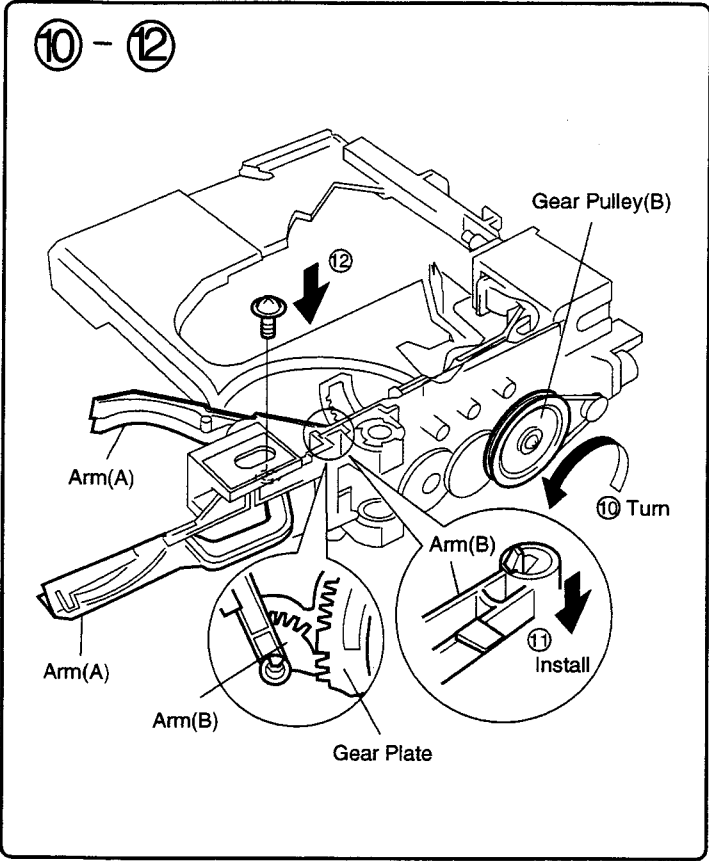


- ⑧ Turn gear pulley (B) and position Arm (A) as shown below.

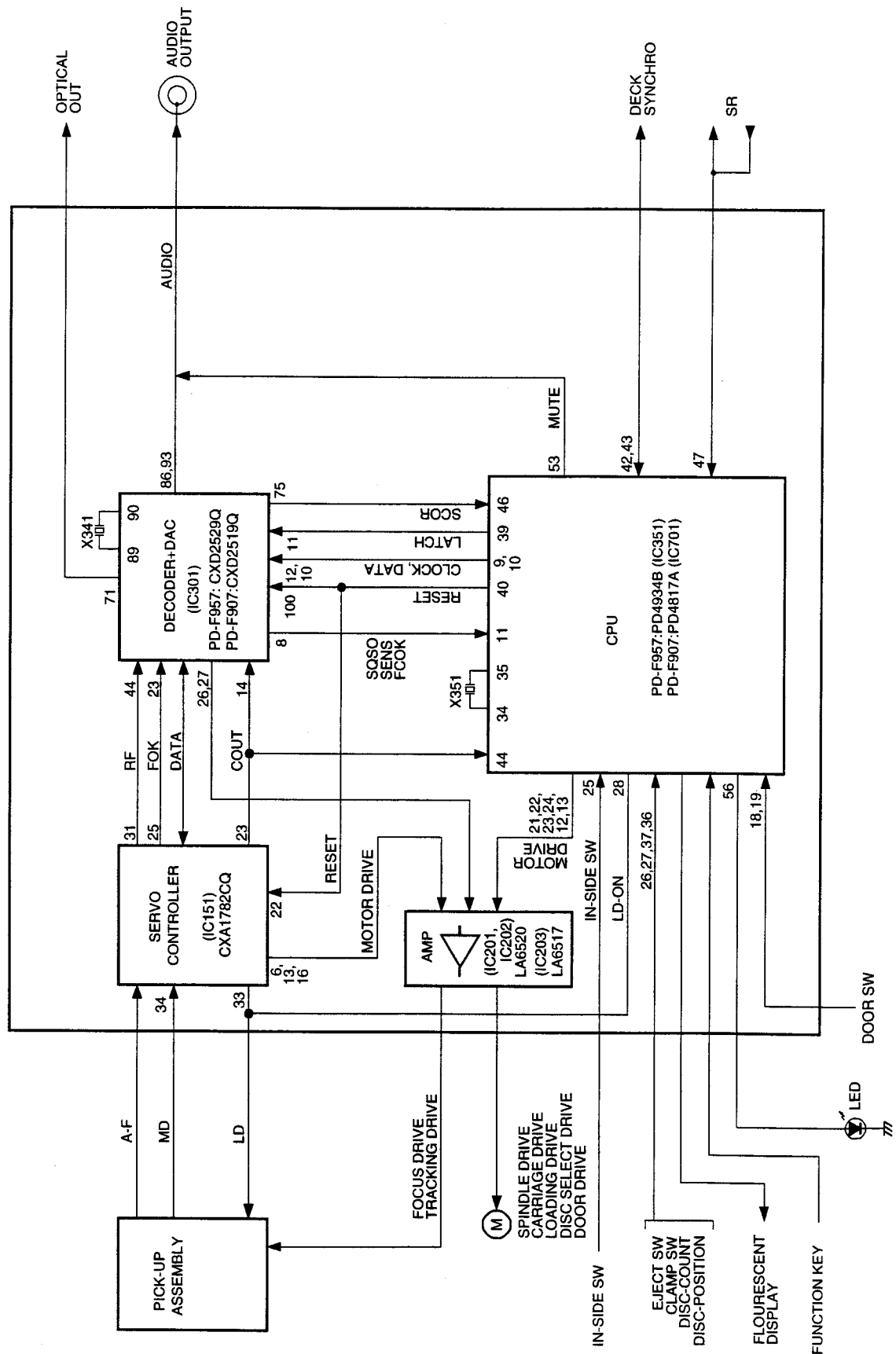
- ⑨

*Note : Do not hold the tip (blade) of arm (A) during operation.*



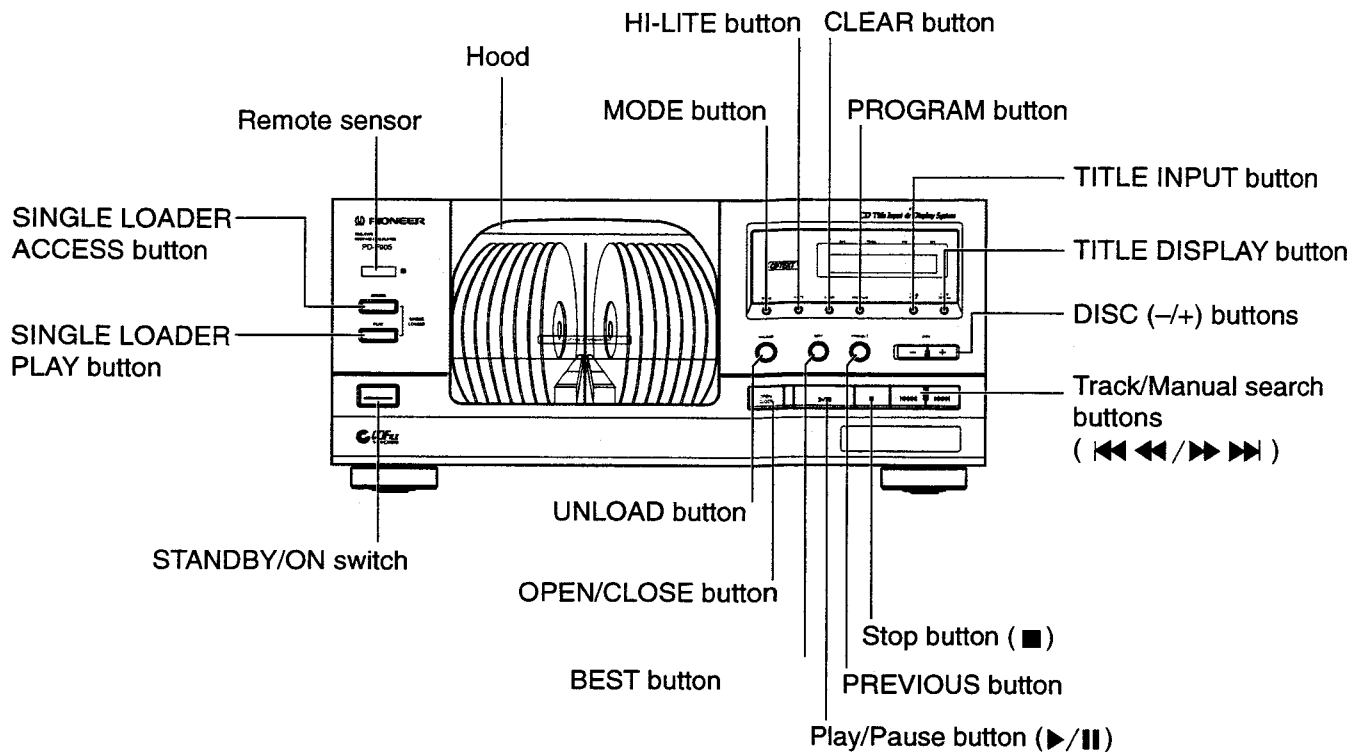


# 7.3 BLOCK DIAGRAM

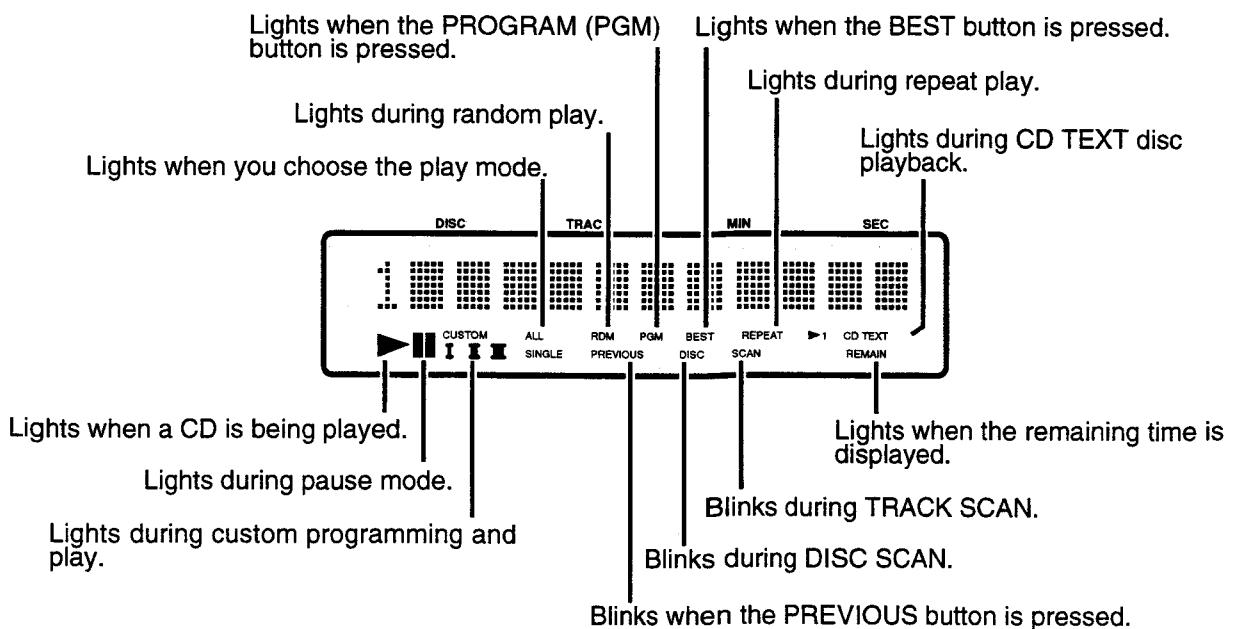


## 8. PANEL FACILITIES AND SPECIFICATIONS

### FRONT PANEL



### DISPLAY





## SPECIFICATION

### 1. General

Type .....	Compact disc digital audio system
Power requirements	
U.S. and Canadian models .....	AC 120V, 60 Hz
U.K. model .....	AC 220-240V, 50/60 Hz
European model .....	AC 220-240V, 50/60 Hz
Multi-voltage model .....	AC 110-127/220-240V (switchable) 50/60Hz
Power consumption	
U.S. and Canadian models .....	12W
U.K. model .....	14W
European model .....	14W
Multi-voltage model .....	14W
Operating temperature .....	+5°C - +35°C (+41°F - +95°F)
Weight ( without package ) .....	6.5 kg (14 lb 3 oz.)
External dimensions .....	420(W) X 402(D) X 193(H) mm 16-9/16(W) X 15-13/16(D) X 7-10/16(H) in.

### 2. Audio section

Frequency response .....	2 Hz - 20 kHz
S/N ratio .....	98 dB or more (EIAJ)
Dynamic range .....	96 dB or more (EIAJ)
Channel separation .....	96 dB or more (EIAJ)
Harmonic distortion .....	0.003 % or less (EIAJ)
Level difference between channels .....	1.0 dB or less (EIAJ)
Output voltage .....	2 Vrms (EIAJ)
Wow and flutter .....	less than $\pm 0.001$ % (W.PEAK) ( below measurable level ) (EIAJ)
Channels .....	2-channel ( stereo )

### 3. Output terminal

Audio line output
Control input jack (Except for U.K. model)
Control output jack (Except for European and U.K. models)
CD-DECK SYNCHRO jack
Optical digital output jack
I/O interface (Except for U.K. and Multi-voltage models)
Head phone jack with volume control (Except for U.S. and Canadian models)

### 4. Accessories

● Remote control unit .....	1
● Size AA/R6P dry cell batteries .....	2
● Output cable .....	1
● Control cable (Except for European and U.K. models) .....	1
● CD liner notes file (Except for U.S. and Canadian models) .....	1
● Index label sheet (Except for U.S. and Canadian models) .....	1
● Operating instructions .....	1

#### Note.

*Specifications and design subject to possible modification without notice, due to improvements.*